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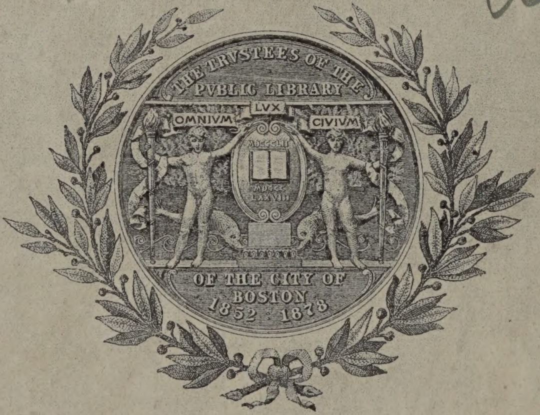

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OUR GREAT BENEFACTORS

Short Biographies

OF THE

MEN AND WOMEN MOST EMINENT IN LITERATURE,
SCIENCE, PHILANTHROPY, ART, ETC.

"NOT FOR AN AGE, BUT FOR ALL TIME"

EDITED BY

SAMUEL ADAMS DRAKE

AUTHOR OF "NEW ENGLAND LEGENDS AND FOLK LORE," "NOOKS AND CORNERS OF THE NEW ENGLAND COAST," "OLD LANDMARKS AND HISTORIC PERSONAGES OF BOSTON," "OLD LANDMARKS AND HISTORIC FIELDS OF MIDDLESEX."

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PREFACE.

TO bring within the limits of a modest volume an abstract and brief chronicle of the world's progress since the introduction of the art of printing, has been the controlling motive in the production of "Our Great Benefactors." While in no sense is it considered exhaustive of the subject, the privilege of selection has been used in as discriminative a manner as seemed needful to this general survey, and to the distinct purpose also of embodying within the several groups of eminent personages contributing to it such only as have an undisputed claim to be classed for all time among the benefactors of the race. This design has eliminated from the work all strictly military heroes or persons of merely local renown.

The biographical articles are the joint production of many writers, who have aimed to tell briefly, clearly, and fairly what has been achieved for mankind by the individual benefactor, the scope or limitations of his mind or work, his habits of thought or training, or the specific causes leading up to the result accomplished. These elements, rather than the imparting of mere encyclopædic information, have been kept in view by the several contributors. An epitome of the world's work being thus presented, it is hoped that the plan, no less than the treatment, of "Our Great Benefactors" may find favor with the public.

THE EDITOR.

MELROSE, MASS., 1884.

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I.

LITERATURE AND ART.

GEOFFREY CHAUCER.

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OUR GREAT BENEFACTORS.

GEOFFREY CHAUCER.

[Date of birth uncertain. Died Oct. 25, 1400.]

AS capricious in its dealings with genius as Dame Fortune herself could be, chronology, that can give the year in which still older poets came into the world, is perplexed as to the date of birth of Geoffrey Chaucer. That he died in the year 1400, and was laid in the Abbey of Westminster — a then unfinished sepulchre, begun two or three centuries previous — are facts duly written in the chronicles of the Plantagenets. Whether, however, the first of the heads that, when the poetic frenzy was at length out of them, have found a cold pillow in our national cemetery was whitened with the snows of threescore years and ten, or was that of a man hardly yet entered upon old age, is a riddle for which the researches of antiquaries have provided no assured solution.

The earliest record concerning the poet that history has had the fortune to preserve shows him a page in the household of the Lady Elizabeth, wife to Lionel, son of Edward III. Crecy and Poitiers were then household words in rejoicing England; and Chaucer, as anxious as his contemporaries to make acquaintance with lance and arrow, the ancient, and gunpowder, that newly invented means of murder, commenced his quest for "the bubble reputation," — not, as might have been expected, in the realms of the Muses, but in the realm of France. The year 1359 found him soldiering there, and late in that same year he was taken prisoner, to be ransomed next spring for the sum of £20.

country and of the town, and by turns soldier, scholar, and man of business. No poet ever dwelt more fondly on the charm of a summer morning as exhibited in field and wood, yet no Londoner had a keener appreciation of town comforts or more relish for the pleasures of society. When the festival of May-day turned half England into the greenwood to imitate for a day the forest life of Robin Hood and Marian, Chaucer took holiday with the rest, and flinging aside his manuscripts would escape into the company of tree and flower, to be saluted with the blithe welcome of the lark, and to describe, with the glee of a poet who had left his bed before the sun, how

> "Fiery Phœbus riseth up so bright
> That all the Orient laugheth at the sight."

When winter had made an out-of-door life cheerless, Chaucer abandoned it, and turned with equal contentment to fireside jest and Christmas revel. The most sociable of mankind, he loved dearly to see his own good nature reflected in the faces of others; and the feelings with which he regarded the grave are admirably expressed in his complaint that there a man must keep house

> "Alone — withouten any compagnie."

In the case of Chaucer himself this lament has proved unfounded. The company of authors that have joined him in Westminster Abbey are almost as many as the old building can contain. He lies there, — a king surrounded by his court. Bearing in mind that neither Shakspeare, Milton, nor the greatest of more modern geniuses has a grave in this national cemetery, it must be pronounced that there is not among the dead of Westminster a poet worthy to rank as the equal of him who, aided by no other magic than that of mind, half created the English language. Before the time of Chaucer that noble language, now the fitting drapery of conceptions bright as the Shining Ones of Bunyan, was little better than the chaotic wreck of Anglo-Saxon forms of speech, — a barbarous jargon, despised of grammarians and rejected by the learned and the nobly born. Chaucer took in hand this rude dialect, the speech of peasant

GEORGE BUCHANAN.

and yeoman, and from the day when he had succeeded in proving that it might be "married to immortal verse," the attention of the educated few was directed no longer to its uncouth ruggedness but to its inborn energy and majesty. His "well of English undefiled," as Spenser nobly termed it, is the source from which has issued the river of our literature, — that majestic current which has not yet ceased to widen as it rolls onward towards the ocean of Eternity.

GEORGE BUCHANAN.

[Born 1506 Died 1582.]

IN writing the lives of remarkable men, a question of no little importance arises at the very threshold: What constitutes success in life? For it is the successful man who is held up to an admiring world as the pattern for all the rest. Several biographies of recent date, written more especially for the young, seem to assume that a faculty for making money is the meaning of success. And there is a common observation in ordinary life which exactly tallies with this assumption. It is said of the man who has failed in acquiring wealth, that he is an unsuccessful man, or that he is a failure. But such a conclusion is clearly illogical; for a man, though the poorest of the poor, may still be a successful man as regards something else which is not money. He is successful if he attain the object of his best efforts, no matter what the object may be. To be truly successful, what a man gains by his best efforts must be worth the gaining, — must make him really better by its acquisition, and must leave him capable of its enjoyment after it is acquired. And this is true not only of money but of all other objects of pursuit. So that, in fact, the world has produced very few that can be called thoroughly successful men. Some of the noblest of mankind have been exceedingly poor; for the unworldlyminded neglect the means of money-making, or cannot comprehend its rules. Money-making is an art or handicraft in which the apprentice must work patiently and laboriously, as in other arts, before he can become proficient. The millionnaire is the profound and accomplished artist in money. His success is the measure of the application of those rules and maxims which constitute the method of his art. In relating the memoirs of the men who come within the category of the world's benefactors, the instances of the millionnaire are rather exceptional than otherwise. And when they come within the list, they come not on the merit of their wealth, but of their excellent bestowal of it. The benefactors are the dispensers, not the acquirers, — the men who add to the world's benefit, whether they increase their own or not. The illustrious scholar and poet whose career has suggested these reflections, which might however have arisen just as naturally out of the career of any truly unselfish worker for the world's good, is an instance of the capability of a man to be a true benefactor to others, and yet himself be frequently in want of the common necessaries of life.

George Buchanan, the greatest of modern Latinists, and the uncompromising denouncer of the political and religious errors of his own time, was born in 1506, at Killearne, in Stirlingshire, Scotland, in great poverty. At the time of his birth his mother was a widow, with eight other children. She must therefore have been somewhat in the position of the worried old lady in the fairy tale, and the children were probably not unaccustomed to the same homely fare of whippings and broth, for those were the days of sound whippings, both in school and at home. It seems that an uncle took notice of George at an early age, because of the lad's abilities. At fourteen he was sent to Paris, then the most noted university in Europe, to continue and complete his education. Here he continued for two years, at the end of which time his uncle died, and he had to return home. Being without resources, he enlisted as a soldier in the Duke of Albany's French troop, but his health broke down under the severe strain and fatigue of this harassing service, and he once more found means to reach Paris and resume his studies. And now for several years he struggled hard against poverty and misery. At length we find him engaged, after taking his Master's degree, as private tutor to the young Earl of Cassilis, with whom he went back to Scotland, and from whose service he was very shortly transferred to that of the King himself. James V. made him preceptor to his natural son, the Earl of Murray, and in this capacity Buchanan commenced a friendship with the chivalrous young prince which lasted until Murray's untimely death. His roving disposition, however, led him to other scenes. Deeply imbued with the spirit of the Reformed Faith, which was then struggling to obtain acceptance in France, he struck upon the idea of attacking the monastic orders, and particularly the Franciscans, with whom in Paris he had come frequently into collision. This he did in a poem called the "Somnium." The King, who had as great an aversion to the Cordeliers as Buchanan himself, urged a renewed attack, and the poet was not loath to repeat his flagellation. The new poem, called "Franciscanus," unfortunately for its too witty author, became exceedingly popular. It was translated into French as "Le Cordelier de Buchanan," and was often reprinted.[1] This terrible *monachomastix* brought down on Buchanan all the monastic orders of Christendom. So violent was the storm, that even the King could not shelter the poet from its fury. The monks got hold of his person, and with very little attempt at the formality of a trial secured him, as they thought, tightly in prison. But somehow or other he escaped and fled to London. London speedily in turn became too hot for him, for Henry VIII. burned both Papists and Lutherans, according to his mood. The Reformation method of the "Defender of the Faith," though unique and conclusive, did not suit Buchanan, so he passed over once more to Paris; and "out of the frying-pan into the fire," according to a vulgar proverb much more understandable in those days than in the present, for there he came across Cardinal Beatoun, one of his most implacable enemies. The horrible fate of poor Helen Stark and the Perth tradesmen was proof of Beatoun's capabilities as an inquisitor. Again he passed on; this time to

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[1] The first edition is that of Sedan, 1599, 8vo.

Bordeaux. In Bordeaux we find him spoken of as the second regent of the Collège de Bourbon, his two colleagues being the famous Antony Muretus as first, and Adrian Turnebus as third. These three famous Latinists are placed side by side by Montaigne as the greatest poets of the time. With Beza and L'Hôpital they claim a front rank in scholarship, but more especially in versification. Posterity, however, has permitted Buchanan to distance all his gifted competitors. He is now universally allowed to be *facile princeps* of modern Latin poets, both for the purity of his style and the harmony of his versification.

The next scene in his eventful life is laid in Portugal, at Coimbra, three or four years later. Once more coming to grief through the monks, who confined him in a monastery, he solaced himself with composing his beautiful Latin paraphrase of the Psalms. On his release he returned to England. The next few years he spent between France and Scotland, part of the time as tutor to the son of the Marshal de Brissac. In 1560 he publicly professed the Reformed religion, and was made principal of the College of St. Leonard. With his active and restless disposition he could not remain quietly as a mere college professor. He threw himself vigorously into the political movements of the time; and in the troubles then agitating his native Scotland he sided hotly with the enemies of the Queen. This must have been from religious conviction; for Mary had shown him very decided marks of her favor, even suggesting the appointment of tutor to her son. In 1570 Murray, to whom he was greatly attached, was assassinated, and Buchanan gave up his principalship to receive from the Government the appointment of tutor to James VI. Many are the stories told of this portion of his life. Among others, it is said that, in consideration of the young prince's rank, and in tender regard for the royal person, a lad of his own age was appointed, at a fixed salary, to receive all the whippings he incurred as a school-boy. And the stern preceptor insisted on their being rigidly enforced in the presence of James, to impress his mind with the seriousness of his misdeeds. If the proxy at times howled to order, no doubt he got plenty to howl for, as there was very little make-believe about Buchanan.

From Queen Elizabeth our hard-working Reformer received a pension of £100, which was a good help towards the History of Scotland he was then engaged upon. This valuable work, "Rerum Scotiarum Historia," apart from its facts, is a pattern of style. Of course, as a modern Latinist, the writer is by no means a second Livy; but he made Livy his model, and thus not only rendered his history readable, but placed it in the front rank of books of its class.

He also wrote a pamphlet against Mary, translated and published at Edinburgh, and called "A Detection of the Doings of Mary," etc. This was his latest work, for in September of the year in which it was published he died. His last request was to his servant to know how much money was left in the house, and on learning that it was not sufficient to bury him, he ordered it to be given to the poor. The people of Edinburgh honored his remains with a public funeral as a benefactor to his country.

Various opinions have been given of Buchanan's public character, according to the interpretations put upon his conduct to Mary Queen of Scots, who undoubtedly had been his benefactress; but his poverty seems a sufficient answer to those who say that his denunciations were uttered for pay from England, and that Elizabeth's pension would account for his ingratitude to Mary. Besides, he was not a man to do things by halves, — he was not mealy-mouthed in expressing his opinions, and he held opinions opposed to monasticism, and, in short, to Romanism, at the very time that Mary sought to confer favors upon him. It might be said, therefore, that it was rather Mary who wished to bribe him to reconciliation with her policy, or at least to keep him silent respecting it. However that may be, he did good and substantial service to the Faith of Scotland, not only by his partisanship but with his pen. Both the "History" and the "Paraphrase" remain monuments of his genius and learning, and lasting ornaments to the literature of his country.

WILLIAM SHAKSPEARE.

[BORN 1564. DIED 1616.]

THE three hundred and fifteenth anniversary of the birth of Shakspeare was celebrated at Stratford-on-Avon on Wednesday the 23d of April, 1879, by the opening of a new Memorial Theatre, and on the three following days by a series of dramatic and musical performances given therein.

This new Memorial Theatre, a compact, picturesque little building, excellently adapted to the occasional purposes for which it is intended, is the result of one of those movements, national in their representative character but straitly limited as to the number taking part in them, which have been set on foot from time to time by select sections among the poet's countless admirers who have not cared to abide under the censure which he has himself pronounced upon

> "Those rich-left heirs that let their fathers lie
> Without a monument."

One of these movements led some years ago to the purchase of the house in Henley Street in which Shakspeare is supposed to have been born, together with that next it and the garden ground attached to both. Another led to the restoration of the buildings, the formation of a museum of Shakspeare relics in their principal rooms, and the planting of the garden with the local flowers, shrubs, and herbs mentioned in the poet's works. Later on, about the period of the great tercentenary celebration in 1864, New Place, the residence in which Shakspeare passed the last few years of his life, was purchased and restored. And now we have this new theatre, which it is hoped may have the effect of adding yet more to the memorials of the poet in his native town by attracting thither in future larger numbers

WILLIAM SHAKSPEARE.

of visitors on the occasion of the annual celebrations of his birthday.

There can be no more fitting place for memorials of Shakspeare than the quaint old town nestling in the heart of rural Warwickshire which gave him birth. It was there that he grew up from youth to manhood in the midst of nature's handiwork, finding "tongues in trees, books in the running brooks, sermons in stones, and good in everything;" and, as we may see by letting his works fall open at random anywhere, these early associations never left him. Wherever he may have been or whatever his occupation, his fancy wandered back to the scenes of his youth, — to "the banks with peonied and twilled brims," the "daffodils that come before the summer dares and take the winds of March with beauty," the "violets dim but sweeter than the lids of Juno's eyes or Cytherea's breath," the "primroses that die unmarried before they can behold bright Phœbus in his strength," the "throstle with his note so true," the "white sheet bleaching on the hedge," the "rich leas and corn-fields," the "brimming river," and the "thick-pleached alleys in the orchards" of his native Stratford.

In the genial spring and soft summer-time, indeed, the whole country round about is redolent of Shakspeare. There you may still find the bank "whereon the wild thyme grows," and drink in the "sweet south as it breathes upon a bank of violets, stealing and giving odors." Harebells, kingcups, and pansies peep out from the greensward in many a cunning nook, where the loveliest of drooping foliage forms a natural arcade at the far end of whose dim vista the comely Oberon might well recline. There are the trees whereon the love-stricken Orlando hung his song-scrolls, and there the grove where the Duke and his "comates in exile" partook of their frugal banquet and sang their sylvan songs; while far away beneath the antique oaks one can still faintly discern on the confines of the wood the cottage embowered in olives where Rosalind and Celia dwelt. Friar Lawrence may still cull his simples in the early dawn, while Proserpine lets fall spring flowers from Dis's wagon, and Ceres scatters her corn-seed over the fruitful land.

Rich, however, as Stratford is in reminiscences of the poet, it is not there alone that we must seek for the influences which served to form his mind and direct the course of his work. Shakspeare was in reality the product of an age of transition and development, — the outcome and complement of one of those rare epochs which mark a new departure in the progress of the race. Born in the midst of great deeds, he was led in, accompanied, and followed out by a procession of great men. All the old bases of European thought and action were being broken up. Printing had rendered knowledge common property; gunpowder had displaced personal valor as the final arbitrator among mankind; astrology and alchemy were disappearing in the crucible of scientific research; necromancy and witchcraft were flitting away before the dawn of enlightenment; superstition was reluctantly yielding to reason her long empire over the human mind; everywhere men were shaking off the spell wrought upon them by priestcraft, and, no longer dazzled by the chivalric splendors of the feudal system, were struggling for freedom of conscience and intellectual and political liberty.

The great Reformation was already an accomplished fact. With a mighty torch lighted at the flame which had consumed the bones of Wickliffe and the living body of John Huss, Luther had illuminated all Germany; and, catching something of the glare by reflection, Zwingli and Petri and Taussen had projected it into the darkest corners of Switzerland on the one hand and the Scandinavian kingdoms on the other. Calvin had brought new breath to the blaze, which, under the influence of Melancthon and Erasmus, had become almost universal; and, quitting the world in the same year that Shakspeare entered it, had left his unfinished work to Beza in France and Knox in Scotland. It was in vain that Rome furbished up her old weapons and forged new ones to aid her in the battle against enlightenment, — in vain that she instituted the Order of Jesus, reorganized the Inquisition, and set up the Index Expurgatorius. The papal splendor had culminated in the pontificate of Leo X., and was now on the wane. Men, indeed, had begun to perceive that freedom of thought was the parent of enterprise, and enterprise the parent of all high achievement; and with the dawning of this knowledge upon the human mind the glory of Rome had departed.

In Italy Tasso was singing the requiem of a royal line of poets which ran back through Ariosto, Dante, and Petrarch to the classic ages. Art, in its passage from the childhood of imitation into the manhood of creative power, had been stricken down by the Church to whose service it had been mainly devoted. Leonardo da Vinci was no more; Raphael was no more; death robbed the world of Michael Angelo a few weeks after Shakspeare had been born into it; Titian, an old man now, was resting on his laurels; Tintoretto, in his zenith, was bettering the instructions of his great master; Correggio had sunk into death beneath his money bags; the Caracci were still at their primers.

Spain, which had attained her highest point of greatness under Charles V., was now shrinking beneath the iron grasp of his son and successor, Philip II., already the widower of one English queen and now suitor for the hand of another. The New World, which in the name of Spain Columbus had discovered, Cortes had conquered, and Las Casas was trying to win, was slipping from her grasp. Her dominion in the West was passing over to England, together with her supremacy on the seas. Portugal, by a bloodless revolution, had re-established her independence. The Netherlands were being purified for freedom in the fiery persecutions of Alva. Spanish literature, at that time perhaps the richest in Europe, was destined to produce but two more great names and then die out. The one was Cervantes, the author of "Don Quixote," as yet a youth of seventeen; the other, Lope de Vega, as yet in swaddling clothes. Camoens, the sweetest of all singers in Portuguese, was writing his "Lusiad" in the Indies.

France had already produced some great men, and was holding still greater in embryo. Francis II. was just dead. His young and fascinating widow, Mary Queen of Scots, was intriguing for Holy Church and another husband. Catherine de Médicis ruled France in the name of Charles IX., with the assistance of L'Hôpital, the Chancellor, and Montmorency, the Constable, — both great men embarrassed by office. The brothers Guise were riding through the land with havoc in their train, to familiarize men's minds with the untold horrors which were afterwards to find their culmination in the massacre of St. Bartholomew. Brave old Gaspard de Coligni and the valiant Condé were training the Huguenots in many a bloody fight for that great day when Henri de Navarre and the Duc de Sully, both children now, should lead them on to victory at Ivry. Rabelais, after laughing away his full measure of threescore and ten years, had quitted life with an impious jest. Montaigne, in his meridian, was indolently blooming into fame. Marot, Saint-Gelais, and Ronsard had already let fall the first gentle droppings of French poetry; and Malherbe, the Chaucer of France, had been born at Caen nine years before Shakspeare saw the light at Stratford. Before he died Descartes had come into the world; and Rochefoucauld, Corneille, La Fontaine, Boileau, Molière, Racine, Fénelon, Pascal, Malebranche, and Montesquieu had followed him.

England had finally beaten off Rome, and taken her destinies into her own hands. Mary was dead, and Elizabeth had already reigned six years. The elder Cecil, wise, acute, far-seeing, had command of the helm; the state bark was manned by men of like mettle. In spite of the perilous vagaries of the love-smitten Queen, the nation was rising rapidly into power. Armed to the teeth, it was defying Spain and intimidating France. The foundations of its naval greatness were being laid. Hawkins was training Drake upon the Spanish main; the sea-dogs of the West were being let loose upon the ocean. Unheard-of enterprises lay seething in the brain of the adventurous Raleigh, then a boy at school. The great middle class was just emerging into life to strengthen alike the thews and the mind of the nation, and thought was broadening throughout the land. Bacon, the father of experimental philosophy, was just out of the leading-strings of infancy. Sackville, afterwards Lord Buckhurst and Dorset, was writing the first lines of the "Mirror for Magistrates." John Lyly, whose "Euphues" was destined to people society with a race of fops of the Don Adriano stamp, was as yet a boy of ten or eleven summers. Spenser and Sir Philip Sidney were still at school; and a host of minor poets and dramatists, whose lustre has been dimmed by the great shadow of Shakspeare, were yet in their cradles.

There were few books then. There were no newspapers. The stage, the only secular public teacher of the time, — the one source whence the masses drew their knowledge of history, their opinions on passing events, their ideas of society and morals, their canons of criticism, their principles of taste, and their politics, — was just being brought out of chaos into order. Udall's "Ralph Roister Doister," John Heywood's interludes and "Gammer Gurton's Needle," had paved the way for true comedy. Bayle's "King John" and Sackville and Norton's "Gorboduc" had paved the way for true tragedy. All had done good service by driving out the old mystery plays. Marlowe, who had that "fine madness" which, as his contemporary Drayton says, "rightly should possess a poet's mind," was just beginning to write. Robert Greene, who, though few give him credit for it, drew the first tender outlines so perfectly filled in by Shakspeare in his long procession of women, was a child of four. George Peele was just thinking about going to Oxford. Rare Ben Jonson was not destined to see the light for ten years to come. Quite a swarm of little dramatists were struggling to the front, to abuse the greater ones and then die out of remembrance.

Still the "inexplicable dumb shows" and the allegorical abstractions of the old Mysteries clung to the drama with a tenacity with which none but a Shakspeare could grapple. Young as it was, moreover, the nascent institution was already growing ribald and licentious. "Judas, like a damned soul, in black paynted with flames of fire and with a fearful vizzard," continued to make his appearance according to stage direction. The Lord Mayor of London had found it necessary to order "that no play should be acted within the liberty of the City, wherein should be any words, examples, or doings of any unchastity, sedition, or suchlike unfit or uncomely matter," under specified penalties of fine and imprisonment.

Of players there was as yet no licensed company. The Children of the Chapel Royal and the Children of the Revels were the only actors who performed before the Court, though there were many strollers like those in "Hamlet" and plenty of amateur companies, who, after the fashion of Bottom and his histrionic associates, played at weddings and similar entertainments. As women had not yet made their appearance upon the stage, all feminine characters were enacted either by boys or young men. Any room, building, or outhouse served for a theatre. The scenery and other accessories of the drama were left to the spectators' imagination. The same stage appointments served through all the acts, and the only indication of a change of scene was the exhibition of a board inscribed with the name of the place supposed to be represented.

Such, then, was Europe, such England, and such the English stage, when William Shakspeare, poet and dramatist, first saw the light, in 1564, at Stratford. Such, too, were some of the influences which helped to mould his mind, — some only; for the flowers and the foliage reflected in the Avon, as it wound its way amongst the orchards and cornfields of his birthplace, had no doubt much to do with the graceful drapery in which he was wont to clothe his wisdom. Born, too, in one of the oldest towns in the country, — a free town, whose traditions extended back to the dim days of the Heptarchy, whose charter dated from the splendid reign of Edward III., and one of whose citizens had attained the dignity of an archbishop when Rome was paramount in England, — the spirit of old times hovered over him, and may have helped to preserve him from the iconoclasm of an age given to idol-breaking.

Of his parentage we know little. Of himself, of his journey through life, his avocations, his haunts, his associates, his struggles, his sorrows, and his joys, we know less. The exact date of his birth even is unknown, though it is certain that he came among us with the spring flowers, and was ushered into the world, so to speak, by the music of the returning birds. That he spent much of his youth in the dreamy meadows and woodlands around his native town, there is no reason to doubt.

Tradition says so, and his works confirm it. That he attended the quaint old grammar-school, and there obtained a smattering of book learning which to a mind like his became the high-road to something like scholarship, is equally certain. But of his youthful avocations after he had left school, and after his father, hitherto the prosperous glover and wool-stapler, elected chief alderman, and honored of his neighbors, had been overtaken by adversity, we know nothing. Tradition sends him down to us a glover, a wool-stapler, a butcher's apprentice, a schoolmaster, an attorney's clerk. He may have been any one of these, or he may have been none. It is even open to doubt whether his parents ever occupied the house to which tradition points as his birthplace, while the singling out of its best bedroom as that in which he was born is the merest matter of inference. Why the 23d of April has been fixed upon as the day of his birth there is no record to show. He was baptized on the 26th, which would hardly have been the case had he been born but three days before. The 23d being the day of his death and the feast of England's patron saint as well, may perhaps account for the invention of a coincidence which in all probability did not exist in fact.

Obscure, however, as is everything relating to the outer life of the poet during these early years, we may gather something from his works touching the activities of his inner life. For it was then, no doubt, that he was conning over his first lessons in the wide-open book of nature, and crowding his imagination with imagery drawn from the scenery around him. It was then that he fabled the cowslips to be Titania's pensioners dressed out in their speckled coats of ruby and gold, and then that he discovered the dewdrops to be pearls hung in "the pretty flow'ret's eyes" by fairies in the night-time. It was then that he saw the elves of the woodland "cropping" night tapers from the waxen thighs of honey-bees, and "lighting them at the fiery glow-worm's eyes;" then that he saw the moon beholding her "silver visage" in the "watery glass," and bathing every blade and flower in "liquid pearl," — the whole "floor of heaven," the while, being "thick inlaid with patines of bright gold." It was then, too, — in "winter's tedious nights," while "the wasted brands were glowing," and while "the scritch-owl scritching loud" was putting him in mind of shrouds and of ghosts gliding from the churchyard, — that he drew up closer to the fire with "good old folks," to hear their tales of "woful ages long ago betid," and to garner up that rich store of folk-lore with which in after life he painted in the shadows of his finest pictures. And it was then, no doubt, that in his after dreams he saw Queen Mab in her fairy coach, Puck at his revels, and the ethereal Titania with her wondrous little serving-men ministering to the wants of "translated" "Bully Bottom."

It was a happy circumstance that Shakspeare should thus have spent that portion of life which is most impressionable amongst the rural scenes of Stratford, not alone because it enabled him to enrich his fancy with the fairest charms of nature, but because it gave him the means of teaching a deeper love of all God's works, and helped to develop in him that placid, world-wide sympathy with all conditions of men and living creatures which was one of his most striking characteristics. It enabled him in an age of class distinctions far more sharply accentuated than our own, to draw even the despised rustic with a kindly hand. And when the notes of his hunting-horns are ringing through the morning air most cheerily, and the "music of his hounds" is loudest, he charitably drops behind either to bestow a word of pity upon the "purblind hare," who "outruns the wind to overshoot his troubles," or to moralize upon the "poor sequestered stag that came to languish." He upbraids "that most ungentle gull the cuckoo's bird" for the unkindly way in which it "useth the sparrow;" and, in the fervent longing for new-mown hay with which he endows Bottom after his transformation, enters into the humble enjoyments of that most patient of all beasts of burden, the ass. His contact with Nature, indeed, seems to have impregnated him with a passionate love of all her works, irrespective of their outward seemings. He not only describes them with affectionate minuteness, but handles them as tenderly as if they were some delicate creation of his own. "As the sun breaks through the darkest clouds," he says, "so honor peereth in the meanest habit." "What!" he asks again, "is the jay more precious than the lark because his feathers are more beautiful? or is the adder better than the eel because his painted skin contents the eye?" And so all through his life we find him singing of "gilded newts" and "gray-coated gnats," of "heavy-gaited toads" and "spotted snakes," of "spinners' legs" and "spiders' webs," of crickets, crows, wrens, and finches, as lovingly as he sings of the most beautiful of God's creatures. He knows no prejudice in favor of the one or the other; they were all made by the same hand, and they are all good in their place.

LOWER HALL.

But necessary as all this training was, it was not sufficient to fit him for the work he had to do. And so, when time was ripe, — after he had married a wife, had had children, and had tasted of those domestic joys and sorrows to which he so often and touchingly refers, — he was driven out into the wide world at the age of one or two and twenty, to mingle in that stern strife of life of which he had hitherto known comparatively little. That his exile was compulsory rather than voluntary, there is little reason to doubt. Not only is the deer-stealing tradition too well corroborated by unmistakable allusions to the youthful frolic — and in those days it *was* a frolic — in two of his plays, but it is also extremely unlikely that a man of his "measureless content," and one so careless of fame withal, should have left his home and all his friends to become a wanderer from choice. Whatever the cause, however, an exile he became, and for a period of seven or eight years we lose all trace of him.

At the end of that time he comes to the surface again in London in a manner very significant. "There is an upstart crow," writes Robert Greene, one of the lesser dramatists of the day, to whom reference has already been made, "beautified with our feathers, and with his tygre's head wrapped in a player's hide," — an evident parody on a line in "Henry VI." — "supposes he is as well able to bombast out a blanke verse as the best of you; and, being an absolute Johannes Factotum, is, in his own conceyte, the only *Shakes scene* in a countrey." From which malicious passage it may be gathered that our poet had already attained some degree of popularity as a playwright, if not as an actor. As to what impelled him to turn his attention to the stage, — whether stern necessity drove him thither, or whether the moving cause was natural inclination, pricked on by the experiences of that high day when his father, as bailiff of Stratford, licensed the Queen's Players to play there, "payed" them "xi l." for their services, and "proveysyoned" them to the magnificent extent of "iij s. vj p." — no one knows. And posterity is left equally in the dark as to the manner in which he was first introduced into the theatrical fraternity of the metropolis.

Once there, however, there was plenty of scope for his talent. The stage had become the institution of the day. The food with which it supplied the eager appetite of its patrons was not of a very satisfying kind. No less than seventeen playhouses had either been erected or extemporized out of the old inn yards within the preceding ten years. The dramatists of the day, though numerous and very fecund, were, with the exception of Marlowe, Greene, and Peele, the merest poetasters. When, therefore, our poet was once able to place his thoughts, instinct with life and beauty as they were, before the thousands of London who crowded the theatres from "three of the afternoon till sunset," — and, "lest it might hurt the morals of the young," no stage play was allowed to be acted after dark, — we may be sure that he had plunged into that "tide which, taken at the flood, leads on to fortune." For though the sturdy old citizens of London were but ill-fitted out with book learning, their constant contact with the drama had doubtless bred in them an unerring judgment as to the intrinsic worth of what was acted out before them. And in the new candidate for their favors they saw what they had never seen before, — a true poet, whose plastic mind had not only moulded to its purpose the surpassing loveliness of the scenes in the midst of which it had expanded into strength, but had also, partly by intuition, partly by communion with the past, and partly by actual contact, seized upon and appropriated the spirit of the eminently vigorous age upon which it had been its hap to fall.

Wherever Shakspeare had spent his days, or whatever had been his occupation during that seven years of his history which to us is a blank, he had used his time well. He had dipped deep into the almost fathomless abysses of the human mind, and studied some of the most perplexing problems of life. All the harvestings of his earlier years, rich though they were, had been thrust upward by the solid mass of deeper knowledge which he had assimilated, until the profoundest truths which he had learned in the meadows and woodlands became but the outer garb and embellishments of his greater utterances concerning human nature. He had learned to portray mankind as it had never been portrayed before. His creations were no mere stage men and women, like the productions of other dramatists, but actual living beings, with all their complex passions working darkly one against the other, and striving ever with that inner consciousness of truth, which, however powerful or however weak it may be, lies deep down in every human heart. His Bottoms and his Slys, and his almost endless variety of the rustic, he had doubtless seen at Stratford. But for his higher creations — his Macbeths, his Lears, his Hamlets, and his Iagos, his Greek and Roman heroes, his English kings and queens, his great statesmen and ecclesiastics, his wonderful and varied portraitures of women, tender, passionate, cruel, and capricious, — for all these, and for his vivid pictures of the strifes of nations, of parties, and of families, and of that harder strife of man against himself, he was no doubt indebted to his wanderings, his reading, and his insight, but more than anything else, perhaps, to the circumstances of the age in which he lived. For as yet the past still gilded the mountain-tops with its dying splendor, and a new and brighter day was dawning ere the old sun had set.

This, then, being the man, and this the kind of preparation he had undergone, it is not surprising that in a day in which the drama was in great demand and the dramatists were feeble he should speedily have found a profitable field for his labor. As with his country life, however, so with his life in London, — we know few of the details. He acted and he wrote; and at length he became part proprietor of the Globe Theatre. He took out a coat-of-arms; he bought property at Stratford. He was high in favor with Elizabeth and James I., and on terms of intimacy with some of the worthiest noblemen about the Court. Jonson, his friend and fellow-laborer, "loved and honored him," as he says, "on this side idolatry as much as any." Spenser, bursting into enthusiasm, declares himself proud of being his contemporary. And so the poet passed placidly onward, the companion of the great, the lover of the lowly, earning his daily bread like any other honest man, regenerating the only public secular teacher of his day, husbanding his own resources against a future that never came, and preparing for posterity "a perpetual feast of nectared sweets where no crude surfeit reigns." He cared not for wealth and worldly honors except as means to an end; for as soon as he had attained a modest competency, he quietly quitted the scene of his achievements and triumphs, and, with "his blushing honors thick upon him," retired once more to Stratford to spend the evening of life among the scenes and friends of his youth.

And there he lived a few short years, and there he died, in the meridian of his working life, at the age of fifty-two, on the same day as Cervantes, and, like Petrarch, on his reputed birthday. He lies buried in the chancel of the old church hard by the Avon, and over his tomb there is a bust, said to have been cut from a cast of his features taken after death. This and the Droeshout engraving — forming the frontispiece to the first folio edition of his works published seven years after his death, and vouched for by Ben Jonson — are the only two portraits of the poet which have come down to us authenticated by contemporary record. But there is no reason to doubt the tradition that the Chandos and Jansen pictures were painted from life while he was in London and in the zenith of his theatrical career.

JOHN MILTON.

JOHN MILTON.

[Born Dec. 9, 1608. Died Nov. 10, 1674.]

THE surrounding circumstances of our youth are generally the moulds from which the events of our after life are cast. The boyhood of John Milton was one in which the highest advantages of domestic example and education were afforded him, so that we expect a cast of a refined character to come from this mould. His father was a man of great proficiency in music, and he displayed considerable ability in many other branches of learning, being a scrivener by profession. By this occupation he acquired a handsome fortune. We think that those views of religious and civil liberty which John Milton so strenuously advocated during the whole period of his life were received by him in his early days from the teaching and moral example of his father. This father suffered much for conscience' sake. He was disinherited by his parents on account of his giving up their religious principles, which were those of the Romish faith, and embracing the Protestant religion. Not only did he receive this training for liberty from his father, but he had also a sound moral and religious example in his mother. She was a woman of modest piety and incomparable virtue. Did not this well-formed mould develop a faithful cast? Was not the manhood of John Milton an exact copy of these two natures combined? He was a zealous advocate for those same principles of liberty that his father was persecuted for upholding, and a thoroughly earnest and pious Protestant.

At first he received his education at home from one Thomas Young, who says that the progress of his pupil in every department of learning was so rapid that it completely outran his utmost efforts.

At the early age of twelve he exhibited quick powers of perception and an extraordinary thirst for knowledge, so that he had to be restrained rather than encouraged, and his books were seldom left till midnight. Determined to make John Milton a scholar, his father sent him to St. Paul's School, through which he passed, entering Christ's College, Cambridge, at the age of fifteen. Whilst there, he exhibited his extraordinary poetic genius, composing a poem on the Gunpowder Plot.

Retiring to his father's rural estate at Horton, in Buckinghamshire, he spent five years in quiet classical study, and produced a delightful composition entitled "Comus: a Mask," which was presented at Ludlow Castle before the Earl of Bridgewater, then Lord President of Wales, by his children. Hundreds of people at the present time use the thoughts that Milton set forth in this production, unconscious of their source. Some of them have become familiar and common in almost every household in the land, and on reading it for the first time we cannot but be astonished with this fact.

After travelling through Paris, Florence, Rome, Naples, and other continental cities, — his tour extending over a period of about fifteen months, — he engaged apartments in the house of a tailor named Russell, in St. Bride's Churchyard, London, where he undertook the education of two of his nephews. Removing from here, being induced by some friends to educate their children, he took a house in Aldersgate Street and became a schoolmaster. But teaching was not the only theme with which Milton's mind was now occupied. There was a stern struggle raging between the King and the Commons, and the public mind was in a great tumult. Now was the time for the early tuition of liberty which Milton had received to be brought into use, and it soon made itself known. He became a most vigorous writer on the side of the Commons; but by so doing he placed himself in great danger. The dangerous position in which he stood may be gleaned from the fact that Alexander Leighton, in consequence of writing some pamphlets, which were in the same strain as those which came from the pen of Milton, had his nose slit and his ears cut off, and received a public whipping; and that Prynne was sentenced to stand in the pillory, to lose both his ears, and to pay a fine of £3,000; and on another occasion the same man was condemned to be branded on both cheeks, to pay a fine of £5,000, and to be imprisoned for life. Thus Milton, in fighting as he did with his pen against the King, was placing himself in danger of undergoing a like punishment. But boldly did he defend his convictions, flinching not before bishops, archbishops, or kings. This boldness is exhibited in an interview he had with the Duke of York, who afterwards became James II. The Duke, whilst talking one day to his brother, the King, expressed a wish to see this old man of whom he had heard so much. The King raised no objection, and an interview was soon the result. Though so very dissimilar in character, the two entered into a very free conversation. But the Duke could not refrain from putting questions of a partisan kind to Milton. He said, "Do you not regard the loss of your eyesight as a judgment inflicted upon you for what you have written against the late King?" Milton in response asked him, if these afflictions were to be regarded as judgments from Heaven, in what manner he would account for the fate of the late King. He argued that the displeasure of Heaven must have been greater against the King than himself, as he had only lost his eyes, but the King had lost his head. Milton must have had courage indeed to have answered the Duke in this manner. It may be remarked that the Duke speedily left the house of Milton, and talking to the King about his visit told him that he was greatly to blame if he did not have Milton hanged. He then described the old poet to the King, and said he was very old and very poor. "Old and poor!" said the King. "Well, he is blind, too, is he not?" Again the Duke described the old man, adding that he was as blind as a beetle. "Why, then, you are a fool, James. You will not punish him by having him hanged, you will be doing him a service; it will be taking him out of his miseries. No: if he is poor, old, and blind, he is miserable enough; in all conscience, let him live."

This extraordinary poet was a man who had to undergo extraordinary trouble. He had only been married about a month to Mary Powell, the daughter of a wealthy Royalist, when his bride desired to spend her summer holidays with her friends in Oxfordshire. Her request was granted. She went, and was to have returned at Michaelmas. Michaelmas came, but brought back no Mary Powell. Milton wrote many letters, but they were not answered. A messenger was next sent, demanding her immediate return; but, sending him away with contempt, she positively refused to rejoin her husband. When this was told Milton, he declared that he would no longer hold her as his wife. This circumstance caused him to study the nature of the marriage tie, which investigation resulted in his publishing a work on the doctrine and discipline of divorce. But Milton and Mary Powell were not parted forever. Four years after, she heard he was visiting a friend; and whilst there she suddenly came before him, and kneeling at his feet, with tears, implored him to forgive her. He forgave her all, and soon received her father, mother, and several of her brothers and sisters into his own house. But this was only the commencement of his trials. His eldest daughter, Anne, as a result of some accident in her infancy, was lame during the remainder of her life; his third son only lived a few months; and in the month of May, 1652, another daughter was born at the cost of her mother's life. In addition to these, his own eyes were growing dim, and the rapid advance of blindness was painfully seen. Soon after the doctor discovered that blindness was approaching, he lost the entire sight of one eye, and about three years after, he says in a letter to a friend, he had become totally blind. Altogether we see that he had a deal of trouble and affliction; but it was all borne by this noble patriot manfully, and with patience and calm resignation, as his poem on his blindness indicates. Again we notice his dignified resignation to his lot in some words spoken by him in reply to one of his antagonists: "It is not miserable to be blind. He only is miserable who cannot acquiesce in his blindness with fortitude; and why should I repine at a calamity which every man's mind ought to be so prepared and disciplined as to be able to undergo with patience, — a calamity to which every man by the condition of his nature is liable, and which I know to have been the lot of some of the greatest of my species?"

Engaged in such an important office as Latin Secretary to Cromwell, one would think that this affliction would cause him to retire from his position. But it had not this effect. He continued his work with all his accustomed energy till the Restoration, dictating all the most important correspondence of the Commonwealth. But it is not on account of this office or of his Republican views that we revere him. That which is controversial and partisan about him is not the man in his best colors. It is as a poet that we delight to look upon him. That by which the world has judged him has not been his political pamphlets, but his poetical compositions. But, be it remembered, it was not in such a light that the people of his own time looked upon him. He was regarded then only as an advocate for Republicanism. The exquisite verses that came from his pen were little valued by the excited people in the time they were written. So little were they regarded that Milton's bust was refused a place in the Poets' Corner of Westminster Abbey; whilst a monument was readily granted and erected to one John Phillips, whose only work was a poem on the "Splendid Shilling," which has long since been forgotten. We need scarcely say that about fifty years afterwards it was with universal approval that a monument was placed within those historic walls "as a tribute to one of the greatest of our poets." That immortal poem, "Paradise Lost," was written during a time of adversity and poverty, but when his powers were in the fulness of vigor. He was blind at the time, and the writing of the verses was done principally by his second wife. She tells us that he composed generally the first thing in the morning, and she had to write him down twenty or thirty verses, — mostly composing more in the winter than the summer. Thus slowly but untiringly his grand work went on; and whilst the first edition was in the press, he quietly departed this life. But though his body has been committed to the dust, his great epic lives, — a noble monument, that will remain as long as the world lasts. It has been translated into Greek, Latin, Italian, French, German, Dutch, and Portuguese; and several other poems of his have been translated into various languages. "Paradise Lost" is, in one respect, like the Bible,— it can be looked into at random, and wherever the eye rests the mind will be enlightened and the heart refreshed by the thoughts contained therein. Dean Stanley truly says it has "colored all English theology from top to bottom." When John Dryden first saw it he was heard to exclaim, "This man cuts us all out, and the ancients too!" The words used by Sir John Denman concerning this poem are well worth quoting. On entering the House of Commons with a proof-sheet in his hand he said, "This is part of the noblest poem that ever was written in any language or in any age."

JOHN BUNYAN.

[Born 1628. Died Aug. 31, 1688.]

THE worth, both moral and mental, of an age may be estimated with considerable accuracy by the value it puts on its great men. If we weigh the reign of Charles II. in such a balance, we shall find it altogether wanting. England had in those days two giants among her children. Of these heroic spirits, the chief, Milton, was writing "Paradise Lost" in blindness, poverty, and neglect; the other, less gifted than he, but still mighty, produced the "Pilgrim's Progress" while he lay a prisoner for conscience' sake in Bedford jail.

Macaulay and Southey — two men who, antagonistic in all other respects, were alike quick to recognize a hero — have left us vivid pictures of Bunyan. His rough boyhood, the strange contrast that his youth presented between the most reckless profanity of speech and the most rigid sobriety of behavior, the fear of hell that for several years kept his soul as in the grip of a fiend, — all these things the biographers in question have set down fairly. Of the intense religious enthusiasm that did

JOHN BUNYAN.

not consume his soul but illumined it, they are, however, incompetent critics. Neither can fully comprehend the height and depth of the spirit of Bunyan. When a recognition of the omnipresence of God had so thoroughly imbued this fervent genius that, lifting up his head after long musing on his sins and the condition to which they had brought him, the perturbed Pilgrim conceived the wrath of his Creator as flaming at him in the glances of the sun and written legibly on the stones of the street, Macaulay can compare him only to the madman who sees frightful faces threatening him from the corners of his cell. When Bunyan, for refusing to cease preaching, and not a word or deed beyond, was addressed as follows: "Hear your judgment. You must be had back again to prison, and there lie for three months following; and at three months' end, if you do not submit to go to church and leave your preaching, you must be banished the realm. And if, after such a day as shall be appointed you to be gone, you shall be found in this realm, you must stretch by the neck for it: I tell you plainly," — when persecution had thus spoken, Southey, contemplating its victim as he turns away to his twelve years' imprisonment, finds him rather fanatic than martyr.

"Will your husband leave preaching?" asked Judge Twisden, when Elizabeth Bunyan pleaded to Sir Matthew Hale and himself for the release of her husband, telling them of the "four small children by the former wife, one of them blind," and that "they had nothing to live upon while their father was in prison but the charity of good people." "My lord," replied the dauntless woman, "he dares not leave preaching while he can speak." She was his wife, and knew him. After years of spiritual conflict, and prayers that were little more than groans, Bunyan at length saw his way clear before him, and would not turn from it because there were lions in the path. In the Book of Martyrs, that marvellous record of the limitless endurance of humanity, he had read, with the unspeakable emotion of a mighty spirit, when out of the distance of centuries there comes to it the voice of a brother, the dying words of the Italian martyr, Pomponius Algerius. Writing from his prison while the stake is being driven into the ground and the fagots heaped, this truest hero can find only expressions of hope and joy. "Here," he tells his friends, "is Mount Sion; here I am already in Heaven itself. Here standeth first Christ Jesus in the front; about him stand the old patriarchs, prophets, and evangelists, apostles, and all the servants of God, of whom some do embrace and cherish me, some comfort me, other some are singing about me. How then shall I be thought to be alone, among so many and such as these!" A few hours and the hand that penned these lines was burned to ashes; the letter remained, to burn its way into the heart of Bunyan. "Was not this man," he cries, "a giant? Had he not also now hold of the shield of faith? In the combat did he not behave himself valiantly?" Only at that day when earth in passing away forever yields up all her secrets, shall we know how large a share Pomponius Algerius had in the production of the "Pilgrim's Progress." The prison where it was written Bunyan might never have entered had not the trumpet voice of the Paduan student so transported his soul. As the doors were about to close on him, the miseries his family must henceforth undergo rose up before him like so many spectres, and had all but thrust him back. Truth in seasons of sorrow is always more pathetic than fiction. No novelist ever equalled the few sentences in which Bunyan expresses the grief that afflicted him at parting with his blind daughter, dearer than his three other children to the father whose face she was never to behold. "The thoughts of the hardships my poor blind one might go under would break my heart to pieces. Poor child, thought I, what sorrow art thou like to have for thy portion in this world! Thou must be beaten, must beg, suffer hunger, cold, nakedness, and a thousand calamities, though I cannot now endure the wind should blow upon thee." Is it to be wondered at that he paused? His conflict of spirit, however, was but momentary. As he hesitated there flamed on him the remembrance of the army of martyrs, and he thought with what trust all these had rendered up their souls to God. "I must do it," he cries to his family. "Though it goeth to the quick to leave you, I must venture you all with God." Once in prison some words of Pomponius Algerius returned again and again to his mind. "In this world," the Italian hero had written, "there is no mansion firm to me, and therefore I will travel up to the New Jerusalem which is in Heaven, and which offereth itself to me. . . . Behold, I have already entered on my journey, where my house standeth for me prepared, and where I shall have riches, kinsfolks, delights, honors never failing." Musing on this city of triumph, Bunyan laid aside one day the laces he was making for the support of his family, and with pen and ink before him began, in his own phrase, "to dream a dream." Presently out of the fire of his trials there had risen a phœnix, and from that dim prison at Bedford a book went forth, the pages of which are lit with something of the light of heaven.

Since the death of its author the "Pilgrim's Progress" has pressed forward on a pilgrimage of its own, that, becoming ever more and more triumphant, shall end only when wreaths of amaranth replace our earthly laurels. The fame of Bunyan has grown in stature with the successive editions of his book. He, whom his townspeople spoke of as a "pestilent fellow," and Bedford magistrates bade get to his tinkering, holds now a foremost place among the worthies that England delights to honor. Bedford, that once imprisoned him as a troublesome fanatic, thinks it her highest honor to possess the statue of the Pilgrim a twelve years' captivity stayed so cruelly on his passage through life. In the very market-place where two centuries ago the blind daughter of John Bunyan sold the laces her father had made, men high in Church and State gathered a few years back to see unveiled the effigy of a man whose allegory is, next to the Bible, the delight of pious hearts, and points more nobly than ever did cathedral spire to the land where, whatever be the darkness of earth, there shines an eternal day. For as there are many reputations that blaze across the firmament of literature like meteors, and suddenly disappear, so a few can be numbered that, at first feeble as the tiny lamp of the glow-worm, wax gradually into a fulness of light by which the steps of generation after generation are guided. Among such stars a splendor of the first magnitude must be assigned to Bunyan. His praise is no longer left solely to the pens of Dissenters, and his greatness and goodness are recognized as the common glory of every Christian church. It is fitting that this should be the lot of a man who died from an illness caught while trying to reconcile a father and son, and who, when required to name his sect, replied, "Since you would know by what name I would be distinguished from others, I choose, if God should count me worthy, to be called a *Christian*."

BISHOP GILBERT BURNET.

[BORN 1643. DIED 1715.]

THE subject of our present memoir was born in those troublesome times which formed the cradle of the independence of which we are proud. He was born at Edinburgh in 1643, descended from an ancient family of the county of Aberdeen. His father was a lawyer, and after the Restoration was appointed one of the Lords of the Session by the title of Lord Crimond. About the age of ten Gilbert was sent to Marischal College, Aberdeen. At fourteen he was admitted to the degree of M. A. His own inclinations would have led him to the bar, but, to the delight of his father, he changed his mind and applied himself to divinity. At eighteen he was ordained. Being shortly offered a benefice by Sir Alexander Burnet, he refused it from conscientious motives. In 1663 he went to England, and after six months returned to Scotland. Afterwards he made a tour of Holland and France. During this journey he was not unmindful of his studies. At Amsterdam, by aid of a Jewish Rabbi, he perfected his knowledge of Hebrew. Not only so, he made acquaintance with the leading men of every section. This was not without fruit. He learned a lesson of charity, which taught him without abnegation of his own opinion to perceive that there were good men in every

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party, — that bitterness of opinion was not becoming the true Christian character.

Upon his return he served as minister of Saltoun for five years. At this period he drew up a memorial of some faults in the conduct of the Scottish bishops, which he thought were not according to primitive custom. He sent a copy of the memorial to each bishop. Such a proceeding necessarily brought odium upon him. To show that he was not ambitious or moved by unworthy motives he retired into private life for two years, during which excessive study endangered his health.

In 1663 he was appointed Professor of Divinity in the University of Glasgow. According to the custom of the time he delivered his lectures in Latin. Here he also laid the foundation of theological knowledge. In 1669 he published a "Modest and Free Conference between Conformist and Nonconformist." Through this work he became acquainted with the Duchess of Hamilton, and with the aid of the papers of her father and her uncle she furnished, he sent forth the "Memoirs of the Dukes of Hamilton." Whilst thus employed the Duke of Lauderdale heard of him, invited him to London, and gave him an introduction to Charles II. Soon after this he returned to Scotland and married Lady Mary Kennedy, daughter of the Earl of Cassilis. This lady was well known for her great knowledge, and highly esteemed among the Presbyterians. There was a great inequality of age, and Burnet, to show that the match was one not of avarice but of affection, caused, the day before the marriage, a deed to be drawn out, by which he renounced any advantage which might have accrued to him from her death, which happened shortly afterwards.

In 1673 he published "Vindication of the Authority, Constitution, and Law of the Church and State of Scotland." This work aroused the attention of the Government, and, being highly approved, he was offered a bishopric. He declined, as he was opposed on principle to what he considered the Popish inclinations of the Court. However, through the influence of the Dukes of Hamilton and Lauderdale, he was brought into the Court and consulted by many. But having offended

Lauderdale, the most unscrupulous of the men of his age, he met with a cool reception. Desirous of returning to Scotland, by the persuasion of friends he remained in London. To their honor, the Dean and Chapter of St. Paul's, knowing all the circumstances, offered him the living of Cripplegate, then vacant; but Burnet, being informed that their first intention was to have offered it to Dr. Fowler, generously declined. In 1675, on recommendation of Lord Hollis, he was appointed preacher of the Rolls Chapel, and soon after elected lecturer of St. Clement's. He soon made his mark, and became popular. In 1681 he sent forth the first volume of the "History of the Reformation," in 1682 the second, and in 1715 the third volume. For this work, which is still highly esteemed, he received the thanks of both Houses of Parliament. During the troublesome time that followed, he was resorted to for advice by persons of all ranks and parties. To avoid all jealousy, he built himself a laboratory and studied chemistry. Often consulted by the King, he was offered the bishopric of Chichester, but with such conditions that he indignantly refused. Soon after, by the machinations of his enemies, he was dismissed from the preachership of the Rolls.

On the accession of James II., having obtained leave, he went to Paris. Here for a time he lived in retirement, but soon after made a tour of Italy. Innocent XI., having heard of him, offered him a private interview, which, however, Burnet declined. Engaging in some religious controversies, he was obliged to depart, making a journey through Switzerland and Germany. At Utrecht he received an invitation from the Prince and Princess of Orange, to whom he had been recommended by the Protestant party in England. From this event he became an object of hatred to James II., and, being prosecuted for high treason, he, having received intelligence thereof beforehand, became a naturalized subject of Holland under plea of marriage with Mary Scott, his second wife. Thus protected by Holland, and under the care of William of Orange, he labored for the welfare of William and Mary. The former he accompanied to England, and afterward was advanced to the see of Salisbury. As a bishop he advocated moderate measures as to Nonjurors and Nonconformists. This brought upon him the enmity of many. The Earl of Shaftesbury writes thus: "As my Lord of Salisbury has done more than any man living for the good and honor of the Church of England and the Reformed faith, so now he suffers more than any man from the tongue and slander of those ungrateful Churchmen who may well call them by that single name of distinction, since they have thrown off all the temper of the former and all concern and interest with the latter."

In 1693, after the publication and condemnation of Blount's anonymous publication, "King William and Queen Mary Conquerors," an opportunity was taken by Burnet's enemies to bring a pastoral letter of his before the House of Commons. It was ordered to be burnt by the common hangman. His second wife died in 1698. Having been appointed tutor to the Duke of Gloucester, and considering the tender age of his own children, he married a widow, Mrs. Berkeley, daughter of Sir Richard Blake. In 1699 he published the "Exposition of the Thirty-nine Articles," a work which, now esteemed, for some time brought odium on the author. The Lord Shaftesbury whom we have quoted above praises this work very highly, declaring it highly worthy of study. "None can," says he, "better explain the sense of the Church than one who is a great pillar of the same." The bishop narrowly escaped a charge of heresy. This perhaps cannot be wondered at when the temper of the age, with its deep feelings mingled with suspicions, is considered.

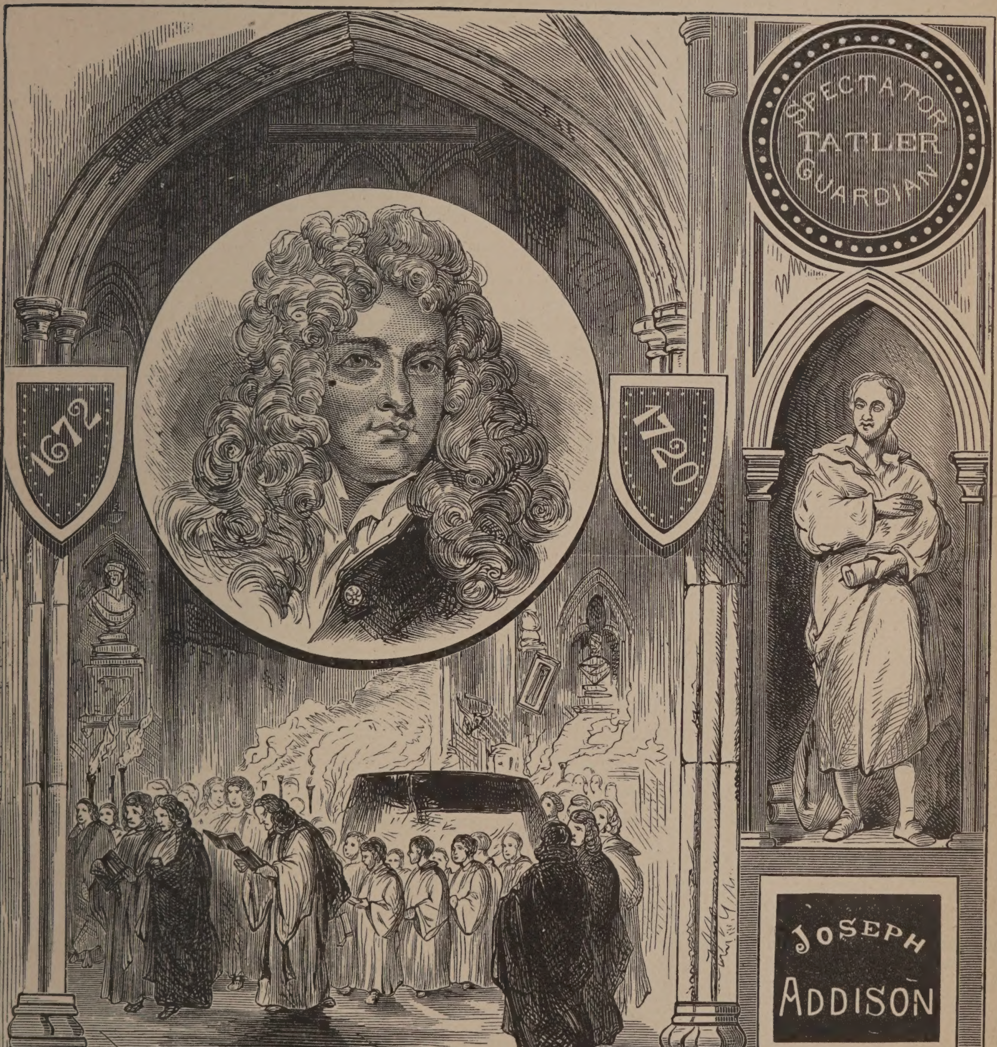
He formed a scheme for the augmentation of poor livings, which he pressed with such success that an Act of Parliament was passed in the second year of Queen Anne for the "augmentation of poor livings."

Bishop Burnet died in 1715, and was interred at St. James's, Clerkenwell, in which church a monument is erected to his memory. In considering the life of Burnet it is necessary to take into full account the times in which he lived and wrote. It was an age of deep controversy and heartfelt conviction, when questions of the deepest moment, both in Church and State, were discussed with a warmth and earnestness which can hardly be conceived. With that fervor on the one side there was mingled a laxity of morality on the other. Burnet is an example of one who, at least in some degree, managed to keep himself free from many entanglements; and though at times the critic may be inclined to take him to task, yet there are many traits in his character which call for admiration and esteem. He had a deep attachment to his country and Church, and was desirous of working for the benefit of both. Of the many works which he has left, and which are too numerous to be specified, we may say that "The History of his own Time" is most valuable, giving a knowledge otherwise unattainable. His style is at times too familiar; but these blemishes are well counteracted by the fulness of his information, the benevolence of his sentiments, and the earnestness of his manner. On the whole, his statements may be received with confidence, while his judgment is always sober and sound.

JOSEPH ADDISON.

[Born 1672. Died 1719.]

NO author possessed of such a comparatively slight amount of learning, and endowed with so little decided genius, has ever succeeded in attaining the fame and popularity of Addison. As a poet he is hardly entitled to be placed side by side with Goldsmith, Johnson, Gray, and others, whom no one would dream of placing in the very first rank; his dramas are scarcely worthy of even as much praise as his poems; as a critic he is found wanting in those essential qualities — a knowledge of the principles of art and of the true motives by which human actions are actuated — without which the work of a critic is without value; and as a statesman he was a most egregious failure.



JOSEPH ADDISON.

And yet but few more popular writers have ever lived. To what then are his fame and popularity as a writer due? A careful consideration of his life, of the history of the times in which he lived, of the state of the literature of the country at that period, and of the various circumstances under which he wrote, is necessary in order to enable us to arrive at a solution of this problem.

The only son of Dean Addison, of Lichfield, Joseph Addison was born at Milston on the 1st of March, 1672. He was educated at Amesbury, Salisbury, and at the Charter-house. In his fifteenth year he went to Queen's College, Oxford, whence he shortly afterwards migrated to Magdalen College, where, through the influence of Dr. Lancaster, who was much struck with some Latin verses of Addison's which accidentally fell into his hands, he was in 1689 elected a demy, and subsequently became a fellow. In his twenty-second year he addressed some complimentary lines to Dryden, who in return permitted him to write a preface to his translation of the "Georgics," and complimented him in the postscript to the translation of the "Æneid" with perhaps more liberality than sincerity. It was at this time the intention of both his father and himself that he should take orders, — a course, however, from which he was dissuaded by Montague, then Secretary of State, who, having procured for him a pension of £300 a year, as a reward for a poem which he addressed to King William, induced him to adopt politics as a profession in preference to the Church. In order to acquire a knowledge of French, with which an intimate acquaintance is so essential to a politician, he in 1699 proceeded to Blois, where for about a twelvemonth he applied himself assiduously to the study of that language. Having then sufficiently mastered French, he in 1700 betook himself to Italy, where he wrote his epistle to Lord Halifax, — a work which, though it at the time added greatly to his renown, will, as Lord Macaulay says, "be hardly considered as in any perceptible degree heightening his fame." While in Italy, all his prospects were for the time darkened by the death of William III. The Whig ministers, Addison's patrons, — Manchester, Halifax, and Somers, — went out of office. Addison shared their fate; all his hopes of public employment were for the time at an end, and his pension was stopped.

Being now obliged to exert himself in order to obtain his bare livelihood, he accepted an engagement as travelling tutor to a young squire, with whom he visited the greater part of Switzerland and Germany. It was during this period that he wrote his treatise on medals, — a work which more than any other shows his intimate knowledge of the Latin poets, and displays his want of interest in the work of the Roman historians and orators, and his comparative ignorance of the Greek writers. Addison's affairs seemed now more hopeless than ever, but fortune came to his rescue. The great battle of Blenheim was fought and won by the English troops. It was a victory worthy of poetic celebration, and yet no poet could be found equal to the occasion. Many poems, if they may be so styled, were poured forth in honor of the event; but their merits, or rather demerits, were such as were calculated rather to render the hero of the occasion ludicrous than to shed any ray of glory upon his victory. At the suggestion of Halifax, Addison was officially commissioned to write a poem in celebration of the victory and in honor of the victor, the Duke of Marlborough, the result of which was the publication of the "Campaign," for which he received a commissionership of appeals with a fairly liberal salary. Two years after, his patrons having returned to office, he was appointed Under Secretary of State, and in 1809 went over to Ireland as secretary to the Lord Lieutenant and Keeper of the Records. It was whilst in Ireland that he wrote some of the most charming of his contributions to the "Tatler," a periodical which had shortly before been started and was then being carried on by his friend Steele. Soon after his return to England he was instrumental in the production of the "Spectator" in 1711; the "Spectator" was followed by the "Guardian," the "Guardian" by the "Englishman," and the "Englishman" in its turn by the "Freeholder." In these various periodicals Addison's best work appeared, in the form of essays. Indeed, it is by these essays alone that he at all deserves the fame he has acquired, or the place he now holds, as a writer.

In 1716 he married the Dowager Countess of Warwick, — a union which proved fraught with much unhappiness to both husband and wife, and which contributed little, if anything, to his advancement. In the following year he was appointed Secretary of State, — an office he was wholly unfitted to hold, and which he was compelled to resign in the spring of 1718, a liberal pension being granted him. He was not, however, destined long to enjoy the pleasure of private life; his health gradually failed him, and asthma, from which he had long suffered, increased in violence, and, being aggravated by dropsy, broke up his constitution. Feeling that his end was near, he prepared to die in accordance with the religion he had always professed and endeavored to carry into practice. A few hours before he died he sent for his step-son, the young Earl of Warwick, who had fallen into dissolute habits, and whom he had long earnestly tried to reclaim. Addressing him with great tenderness, he said, "I have sent for you that you may see how a Christian can die," hoping doubtless that such an affecting scene would have more effect than all his previous admonitions and expostulations. He died on the 17th of June, 1719, having just completed his forty-seventh year.

Having now shortly sketched the principal events of his life, we are in a position to consider the question we before propounded: To what are Addison's fame and popularity as a writer due? In the first place he flourished in a fortunate hour. Dryden was no more, and Pope was yet in embryo. England could boast of no poet, of no author, able to satisfy the growing literary desires of the age. Education was rapidly increasing, more especially amongst the squires and knights, who a generation before were wholly devoid of even the rudiments of learning, and accordingly despised it. They wanted something light, gay, entertaining, and cheerful; anything deep and ponderous, entailing labor in perusal, and wanting in lively interest, would have simply wearied them, and induced them to relinquish all endeavors to find amusement in literature. Here, then, was a serious want, a great popular want, and no one but Addison able to satisfy it. He did satisfy this want, and in a manner which does equal credit to his memory as a man and as an author. His papers to the "Tatler," the "Spectator," the "Guardian," the "Englishman," and the "Freeholder," humorous, witty, and gay, are such in character and in style as pre-eminently to suit the exigencies of the age for which he wrote. Here, then, are the first secrets of his success, — he supplied a general want and wrote for the general public, and not for the learned and wise alone. But there was yet another potent reason which greatly contributed to his fame and popularity. It was at the time an almost universally accepted theory that it was impossible to write in a style at once pleasing and gay without descending to coarseness and immorality, that wit and modesty in literature were incompatible. Addison dispelled this unhallowed idea. "He taught the nation that the faith and morality of Hall and Tillotson might be found in company with wit more sparkling than the wit of Congreve, and with humor richer than the humor of Vanbrugh."

Of Addison's character much has been written with the purpose of showing that he is not entitled to be viewed in so favorable a light as he has been generally represented. Many serious charges, which seem at first inconsistent with the true profession of virtue, are brought and to a certain extent proved against him. But even granting that all the accusations which have been made against him were proved, we yet prefer to regard his character in a more favorable light than his detractors are willing to concede. In forming an opinion of the character of a man we must not base our conclusions, or indeed be greatly influenced in the formation of our opinions, by isolated accusations which may be proved against him, but must rather base our judgment upon a general review of his actions and conduct of life. Looking at Addison in this light, we find him from the first to the last professing principles of pure Christianity and morality, continually endeavoring to carry these principles in practice, and constantly and fearlessly advocating them in a most forcible manner. He was, however, doubtless not endowed with that strength of character which is necessary to enable men always to act in accordance with their

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principles. He was afflicted with a somewhat jealous and rancorous disposition. These infirmities — and who amongst us is wholly free from any? — at times overcame his endeavor to carry into practice the principles which he felt to be true, and which he used every endeavor to practise and to inculcate in others, but they are wholly insufficient to show that he was a hypocrite. Addison was not a great man in any sense of the word; but when we consider the whole course of his life, we cannot in fairness deny him the attributes of conscientious morality and virtue.

> "He taught us how to live; and, oh! too high
> The price of knowledge, taught us how to die."

SAMUEL JOHNSON.

[Born Sept. 18, 1709. Died Dec. 13, 1784.]

THE eighteenth century, so seldom fortunate in its pictures, has at least produced one on which the eyes of Englishmen must forever rest with reverence, — the picture of Samuel Johnson standing bareheaded in the market-place of Uttoxeter, while the rain beat down on that uncovered head, and the bystanders looked with mocking wonder on the noble, sorrowful old man. Their sneers were nothing to him, trifles of as petty import as the Present, that for one brief, heart-stirring hour he had forgotten. His eyes and thoughts were fifty years away; the rugged veteran, gray and infirm and famous, was recalling with a yearning and remorseful sorrow how, half a century before, he, out of the wilful petulance of boyhood, had cruelly disobeyed his father. Old Michael Johnson, the struggling bookseller of Lichfield, whose custom it was to go over on market-days to neighboring towns and set up his book-stall among the other stalls that filled the market-place, had been kept from one such journey by illness. He begged that his son would replace him, the market-town for the day being Uttoxeter. The lad refused. Pride and vanity and shyness were all stirring within him; and he could see, not the sorrowful face of his sick father, only the degradation, as he fancied it, of playing the stall-keeper, and his ungainly figure exciting the ridicule of an Uttoxeter crowd. How many times in after life did the recollection of that thankless stubbornness sting in upon him, "sharper than a serpent's tooth," bitter as is always the memory of ingratitude! He could not atone for it; the grave lay between him and his father and prevented all atonement; but at least he would do his best to prove by tears and prayers and sorrowful penance the depth of his repentance for that single disobedience. It reads with the solemnity of some Biblical record, the story of the aged writer, fresh from the applause and homage of London, standing humbly bareheaded in that Uttoxeter market-place, while the rain fell and the crowd jeered, and his earnest, rugged spirit lifted itself in an imploring prayer that his Heavenly Father and his earthly would both forgive him that boyish trespass. English biography has not such another scene.

An uncouth, repellent exterior, under which emotions of the deepest and truest tenderness rested in living freshness, ready, at the summons of great joys or sorrows, to burst forth, as water leaped from the rock beneath the rod of Moses, — such is the aspect that distinguishes Johnson above all great men who ever stamped their impress on a century, and left it there an image over which generations yet unborn might meditate. His history lives, though his writings with few exceptions lie unread on the dusty shelves of libraries; and lives, not only because Boswell has recorded it in the first of biographies, but because its character proves Johnson to have been one of the first of men. His startling prejudices and despotic rudeness, the contempt he sometimes felt and expressed for men still greater than himself, — these and other unpleasant traits kindly Time has softened for us. They were of the clay, not the spirit, and may be suffered to follow into oblivion the clay that was once the uneasy prison-house of this kingly soul. The great

Englishman himself remains to us, — the man who, whether starving in unfurnished garrets or holding converse with his sovereign in the royal library, whether earning fourpence-halfpenny a day or gifted with a sufficient pension, was always entirely earnest and noble and sincere. He had satire for the complaints that are born of trifles, for bitter misery the readiest and most generous help. There were many in England at that day whose speech was filled with a sentimentality of which their lives were barren, — men that, like Sterne, could "whimper over a dead ass and neglect a living mother." There was only Johnson who, finding lying in the street at late night a half-dead outcast, one of the miserable class always so hideously plentiful in London, could lift this wreck of a woman with rugged tenderness, bear the sick and starving wretch to his own house, and when with much trouble and expense she was nursed back to health, seek to put her into an honest way of living.

Suffering as even authors have seldom suffered, he preserved his heroic unselfishness and his wealth of manly affection untarnished through it all. We picture him walking homeless through the streets at night, or sharing with Richard Savage the opportune shelter of some cellar; we see the melancholy, indomitable worker, roughened now by trials that would have broken down a nature with any taint of weakness, as, having waited day after day in Chesterfield's anterooms, he turns for the last time from that delusive mansion, and shakes forever the hope of patronage from his soul. And remembering how, when his Dictionary, the colossal result of seven years' labor, had brought him both fame and competence, he used his good fortune for the profit not of himself but of others, — that out of a pension of three hundred pounds yearly he devoted scarce eighty to his own wants, — and that his very house was made comfortless to him by inmates whom he had received there out of the purest charity, — we feel that Johnson, with all his grimness, had no more of the bear than the skin, and was of eighteenth-century Englishmen the man whom, next to Burke, it is most possible to respect and love. "He loved the poor as

I never saw any one else love them," was the testimony of Mrs. Thrale. The same strong powers of affection, held always in restraint by a rugged manliness, are apparent in all the actions of his life. The best test of genuine greatness is, perhaps, the conduct of a man towards the women who are bound to him by the dearest of ties, — towards mother, sister, and wife. Tried by this standard, the sterling metal of the character of Johnson is at once apparent. No man in the whole history of English literature was more strangely married; yet his painted, fantastic, over-dressed, half-educated helpmate, more than twenty years the senior of the man who had wedded her, found him to the end of her life the most tender and forbearing of husbands. When he and she had both passed away into that eternity where all ages are equal, passages such as, "This was dear Letty's book," or, "This was a prayer which dear Letty was accustomed to say," were found in books of devotion that had belonged to her, written there by Samuel Johnson in memory of the wife who died thirty years before him. At her death he wrote to his friend Dr. Taylor a letter which, said Taylor, "expressed grief in the strongest manner I had ever read." Long, very long afterwards, the time came when Samuel Johnson was himself entering the valley of the shadow of death, never again to emerge therefrom. On the day that was the anniversary of his wife's death, he took his diary and wrote in it a few words, as sorrowful as they are few. "This is the day on which, in 1752, dear Letty died. I have now uttered a prayer of repentance and contrition. Perhaps Letty knows that I prayed for her. Perhaps Letty is now praying for me. God help me. Thou, God, art merciful, hear my prayers and enable me to trust in Thee."

With that dying cry of the sorrowful, great heart we may fitly close our thoughts of Johnson. His writings may pass away from us, the memory of such a life can never pass. It remains to proclaim to the farthest generations of his countrymen, "This was a man;" to preach how in sickness, destitution, almost in despair, a spirit truly Titanic can still approve itself sublime.

THOMAS GRAY.

THOMAS GRAY.

[Born 1716. Died 1771.]

IF England owes a debt of gratitude to Gray, it is because he is the author of two poems that have sunk deep into the nation's heart. His "Elegy in a Country Churchyard" and his "Ode on a Distant Prospect of Eton College" have had whole generations of admirers, and will have many more.

Blessed with a good education at Eton and Cambridge, the friend of West and Horace Walpole, conversant with the Latin and Greek classics, skilled in modern languages and devoted to poetry, Gray visited Florence under the most favorable auspices, and prolonged his journey to Rome, Naples, and Herculaneum. There he began a Latin poem on the Principles of Thought; but it is well for us that he broke with Horace Walpole, and returned to his native country to cultivate his genius for English verse.

In view of the marvellous rapidity with which famous poems have been thrown off in later days, it is almost amusing to be told that the "Elegy," on which Gray's reputation is so deservedly founded, though commenced in 1742, was not completed till seven years after. But whatever may have been the cause of the composition being spread over so long a period, the result has been commensurate with the labor. Not a line in the piece has missed its mark, or failed to awaken unfailing echoes of delight. To have written it and the Eton College Ode was in his case to have fulfilled the purpose of his existence, for his studies in architecture and his professorship of modern history at Cambridge are now scarcely remembered. What endures is that lively picture of the happy playground at Eton, where life is all freshness and promise, where the evils and sorrows to come are mercifully veiled, and youth is acquiring strength to support the labors and trials of riper age. Gray wrote little, but what he wrote was so good! He knew how to avoid the snare in which so many are entrapped, and did not overwrite himself. Yet he read enormously. His notes on Plato and Aristophanes were edited by Mathias. He was well versed for his time in zoölogy and botany. He was skilled in heraldry and a diligent antiquarian. His correspondence remains to testify to his studies and taste, though his biographer — Mason — in his mania for emendation has altered Gray's letters where he deemed them capable of — improvement. So Nahum Tate *improved* Shakspeare, and revived "King Lear" "with alterations"!

In a few stanzas of the matchless "Elegy in a Country Churchyard" this reserved and silent scholar has left us a picture, applicable in many of its features to himself, with which we are all familiar: —

"There at the foot of yonder nodding beech
That wreathes its old fantastic roots so high,
His listless length at noontide would he stretch,
And pore upon the brook that babbles by."

In the solitude of nature the fire of his genius fused the treasures of his mind into one equable stream of golden verse. In this beautiful "Elegy" he does what so few can do, — speaks well on ordinary topics, and is fresh and original without exaggeration or affectation of any kind. If any one thinks he can improve any expression or epithet in it, let him try. Jewel succeeds jewel line after line, and Time discovers no flaw. Such a poem is a lasting service rendered to any country; and poets when they write in this wise are social benefactors of no mean account. Their influence is not to be measured by the number of their admirers, but by the quality of the minds into which their lessons and their music sink deep. For the persons who have thus imbibed the teaching of the best poets are really the individuals who give tone to society and help most effectually to improve their generation.

ADAM SMITH.

ADAM SMITH.

[BORN 1723. DIED 1790.]

THE singularly uneventful lives of some very remarkable men render it an extremely difficult task to frame such a memoir as can possibly be made interesting to an ordinary reader. Everybody has heard of the "Wealth of Nations." The book may be seen on almost any second-hand book-stall, and possibly a few of those who know that it is a celebrated book on the subject of political economy may have even gone so far as to read it. But its popularity is like that of "Paradise Lost," or the "Iliad," or the "Divine Comedy,"—it is a good deal talked about; and as Voltaire has wittily said, people take that as a sufficient excuse for not reading it. Unfortunately for the more particular sort,— persons who like to know something of the personal character of their author, and who gather thereby a more distinct portraiture, and one capable of being better remembered than a mere eulogy of abstract qualities,—the only important biography of this distinguished writer, whose name is almost a household word, is the very brief and interrupted account prefixed by Dugald Stewart to the collected edition of his writings. Brief as it is, it is far too effusive on the literary side of the man to be quite satisfactory to one who is neither a philosopher nor a political economist. And being brief, it necessarily omits many things that would have been extremely interesting to know about so notable a man. But it is very truly remarked, though in a somewhat different sense if we recollect rightly, in Taylor's "Philip Van Artevelde,"—

> "The world knows nothing of its greatest men."

It is a sentiment certainly that may account for our ignorance of Homer and Shakspeare and Plato, and one or two more;

but it scarcely accounts for our ignorance of those who only lived a century ago. The story of Adam Smith's life, apart from his studies, his lectures, and his books, is brief, because the life itself was almost entirely made up of studies and lectures and the making of books. He was born at Kirkcaldy, — "the lang toun," — claimed in the Dark Ages as the birthplace of the famous wizard Michael Scot — on the 5th of June, 1723. His father, who had been comptroller of customs in that busy little port, died some months before he was born. He was an only child, and consequently was brought up with the greatest care and tenderness by his mother, for whom he ever cherished a most marked and lively affection. At a proper age he entered the grammar school of Kirkcaldy, and remained there until removed to pursue his studies at the University of Glasgow. He entered Glasgow at fourteen, and remained three years. Being intended by his fond mother for a clergyman of the English Church, he left the old Scottish university to proceed to Oxford, and entered Balliol College as a Snell exhibitioner. Here for seven years he studied mathematics, natural philosophy, and the classical and modern languages; but he gave up the idea of entering the Church. Indeed, to a man of his simple and earnest character, and taste for metaphysical studies, the Church, which should have been his natural asylum, possessed at that time few attractions. Most of its clergy were cold, worldly, selfish men, — preachers, or at least writers, of stilted compositions styled sermons, usually dedicated to some person of quality on whose bounty they were mainly dependent; but as pastors, or even as educational guides to the young, the poor, and the ignorant generally, they were wofully neglectful and indifferent. Besides, the illiberal manner in which he felt himself treated while at Balliol, says a writer in the "Gentleman's Magazine" for 1790, drove him into retirement, and retirement fortified his love of study. Perhaps his somewhat ungainly Northern manners suggested a certain kind of rudeness or neglect. His frequent absence of mind, too, was a temptation which neither fellow-students nor attendants could resist. The first day he dined at Balliol a servitor, seeing him neglect his dinner, asked him to "fall to, for he had never seen such a piece of beef in Scotland." The recollection of this in his prosperous latter days, when living in hospitable style at Edinburgh, always used to call forth a smile whenever a similar piece of beef was brought to table, and would generally lead to his repeating the anecdote. Another reason why he did not care to enter the Church was that while at Oxford he had fallen in with the doctrines of some of the French writers, especially Voltaire, on the subject of religion.

The idea of taking orders having been finally abandoned, the next suggestion towards a profession — for he had no patrimony — was as a travelling tutor. But though a good scholar and of unblemished moral character, his manners were not quite what they should be; so for some time this intention was set aside, and in 1750 he opened a class for teaching rhetoric in Edinburgh. From this he was called in the following year to the chair of logic, and shortly afterwards to that of moral philosophy in the University of Glasgow. Here his English training proved of essential service. Although inferior in classical learning to his predecessor, the celebrated Dr. Hutcheson, yet in pronunciation and style he is said to have been much thought of, as superior to the usual standard of the Scotch universities. His recluse habits during the seven years' residence in Oxford had enabled him to master the works of the French encyclopædists, and he had learned to think of Hume "as by far the greatest philosopher that the world had ever produced." His admiration and affection for Hume lasted throughout life. Of Dr. Johnson, his no less equally distinguished contemporary, his opinion was not quite so flattering. In one of his lectures he thus refers to the mighty lexicographer: "Of all writers, ancient or modern, he that keeps off the greatest distance from common sense is Dr. Samuel Johnson." Of course the amiable dictionarian returned his opinion with interest. In the "Edinburgh Review," for October, 1840, is related an anecdote of the interview between the paper warriors. "Some of our friends," said Adam Smith, "were anxious that we should meet, and a party was arranged for the purpose. In the course of the evening I was seen entering another society, and perhaps with a manner a little confused. 'Have you met Dr. Johnson?' my friends exclaimed. 'Yes, I have.' 'And what passed between you?' 'Immediately on my being introduced he addressed me, "Dr. Smith, how came you to say that Hume 'was nearly the best man you ever knew'?" 'Because he was so,' I answered. 'Sir,' he replied, 'you lie.' 'And what,' said they, 'was your answer?'" For the answer we must refer to the volume quoted.

Dr. Johnson had really said, "*that detestable infidel*, Hume," which of course considerably nettled his countryman and friend. But then the Doctor was always heavy upon the Scotch.

In course of time Dr. Smith's lectures became much talked of for their originality and interesting style, and visitors were attracted to look in whilst staying in the neighborhood. Among these was the Right Honorable Charles Townshend, who had married the Lady Dalkeith; and he at once proposed to Smith that he should resign his professorship and undertake the office of travelling tutor to the young Duke of Buccleuch. It so happened, while Mr. Townshend was at Glasgow, that the Doctor, who took a lively interest in manufactures, invited the Englishman to inspect the tanneries. They were standing on a plank laid across one of the tan-pits, and the Doctor, talking warmly on his favorite topic, quite forgot the precarious nature of his footing, and plunged headlong into the nauseous pool. He was dragged out, stripped, covered with blankets, and carried home in a sedan-chair.

On his leaving the university he summoned all the students in his classes together; and as the censor called out their names he returned their fees, saying that as he had not completed the course he was not entitled to the payment. He then handed over the manuscript of the lectures to one of the elder students, requesting him to complete the course. And this was actually done. As a rule he would never allow any notes to be taken of his lectures, lest they should be transcribed and published.

He travelled with the Duke two years, and soon after his return published his "Inquiry into the Causes of the Wealth of

Nations," which was originally published in 1766. The book at first was by no means popular, which is no wonder, for it is not a popular sort of book. It was brought into notice by a remark made by Fox in the House of Commons. During his residence at Glasgow Dr. Smith published his "Theory of Moral Sentiments," of which the first edition appeared in 1759. The honorary degree of LL. D. was conferred upon him by the university in acknowledgment of his distinction as a professor, but he never assumed the title in private life. While in Paris, he became acquainted with most of the distinguished literary men of the time. Among them were D'Alembert, Helvetius, Marmontel, Necker, and Quesnay.

In 1788, through the influence of the Duke of Buccleuch, Smith was appointed one of the Commissioners of Customs for Scotland, on which he removed to Edinburgh, where he spent the remainder of his life. His closing years were passed in tranquillity, amid a small circle of friends, who generally supped with him every Sunday. His mother resided with him until her death in 1784; and her loss and that of his cousin, who had been his housekeeper, probably hastened his death, which took place in July, 1790.

The great personal characteristics of Dr. Adam Smith were his generosity and absence of mind. The former has already been indicated in the manner in which he returned the students' fees on resigning his professorship. Perhaps his slipping into the tan-pit was an instance of the latter. But his obliviousness to the most ordinary occurrences which transpired around him was notorious. It seems curious that a man who could write so well on practical matters, and could handle the question of finances in so masterly a manner, should himself have been a most unpractical man. His friend and biographer, Dugald Stewart, says, "He was certainly not fitted for the general commerce of the world or for the business of active life." His acts of private charity far exceeded what might have been supposed to be the extent of his means. His integrity and truthfulness were without a stain. Indeed, the only serious blemish in his truly excellent and upright life was his avowed participation in the religious opinions of his friend David Hume, for which Dr. Johnson was so angry with him.

The work by which he is best known, "An Inquiry into the Nature and Causes of the Wealth of Nations," has been frequently reprinted. The best edition is that of M'Culloch. It overthrew the errors of the mercantile theory, that money was wealth; those of the agricultural theory, that land was the only source of wealth; and established the principle that the true source of wealth was labor. He shows, in opposition to the opinions popular among merchants, politicians, and even statesmen in his own time, that wealth does not consist in the abundance of gold and silver, but in the abundance of the various necessaries, conveniences, and enjoyments of life. His errors — for of course in so extensive a work it would be impossible to escape error at times — lean towards the theories of the French economists. For example, he imagines a distinction between individual and social or national advantage, and admits that the two do not always coincide. But it is clear that as the nation is but an aggregate of individuals, the individual benefit must be that of the nation; provided, of course, that the individual benefit is not confined to certain persons and withheld from others. A complete criticism and analysis of this celebrated and valuable work may be found in M'Culloch's "Introductory Discourse;" and the best way to read it will be under the guidance of that able and clear-headed expositor and commentator. Our business now is as much with the man as with the author, though his world-wide reputation is due to his books; and, as a man, we know that he had the utmost and most outspoken contempt for whatever was malicious, hypocritical, or mean. As a writer he labored incessantly to promote the best interests of mankind.

OLIVER GOLDSMITH.

OLIVER GOLDSMITH.

[Born 1728. Died 1774.]

HIGH among the literary celebrities of the last century stands forth the name of Oliver Goldsmith. The subject of the present sketch was born on the 29th of November, 1728, the second son of a poor Irish curate, whose character he has so affectionately and graphically described in his "Deserted Village." The rudiments of his education were received from an old soldier, who had been a quartermaster in the wars of Queen Anne, and who kept a humble school in the village of which Oliver's father was minister. The character of this eccentric worthy, depicted in the "Deserted Village," is unrivalled, and is perhaps the finest thing of the kind that Goldsmith has left behind him. The old soldier, from all accounts, appears to have been a man of considerable ability, teeming with humor, and possessed of peculiar talents in relating romantic adventures and amusing anecdotes. To the latter circumstance some persons attribute the predilection which his pupil exhibited in later years for a wandering and unsettled life. As a child Goldsmith is reported to have been a general butt of ridicule for his ugliness and supposed stupidity; however, as regards the latter reproach, he could not have suffered long, having already at a childish age vindicated his intellectual place by the verses which opened to him an academic destination.

From the village school Goldsmith was transferred to an academy at Elphin, where, however, he did not continue long. Some relations of his uncle, convinced of the lad's abilities and being aware of his parents' small means, raised a subscription among themselves, and resolved to provide him with a liberal education. In furtherance of this plan he was sent to a school at Athlone, and afterwards to Edgeworthstown, in Longford, the principal of this seminary being the Rev. Patrick Hughes, to whom, as Goldsmith himself confesses, he was indebted for much valuable instruction. At the age of sixteen, after having completed the usual curriculum of study, he was admitted a sizar of Trinity College, Dublin. His troubles now commenced. The tutor under whose care he was placed was a Mr. Wilder, a man noted for his harshness, rigid discipline, and violent passion, totally unfitted for the charge of such a pupil as Goldsmith proved. The following anecdote is given as showing the relations which existed between them. Oliver, who was always fond of a little conviviality, had invited a number of persons of both sexes to be present at a dance and supper in his chambers. Wilder, either incensed by this breach of discipline or roused by some other provocation, rushed into the room where the assembled revellers were enjoying themselves, struck Goldsmith before all his guests, whom he drove from the college without ceremony or apology. Oliver, exasperated by this treatment, in a violent passion, pawned all his books, fled from Dublin to Cork, whence, having spent all his money, he proceeded on a rambling tour through the country. At last, convinced of his folly in continuing this kind of life, he made his condition known to his family. In the meantime, a reconciliation with Wilder having been effected through the influence of his elder brother, Goldsmith returned to the university, where he continued to reside until he obtained the degree of B. A. About this period he was strongly pressed to enter the Church, which he stoutly refused to do; but, being without resources, accepted the post of tutor in a private family. Having saved about £30 in this occupation, Goldsmith bought a horse, and proceeded on another of his wild rambles. However, in about six weeks' time, after having gone through the most ludicrous adventures, he appeared at his mother's house, mounted on a most wretched little pony, and without a halfpenny in his pocket. The following is one among many anecdotes which are related of his generosity and kindness of heart during this tour: —

"Recollecting that one of his college friends, who had often pressed him to spend a summer at his house, lived on the road not far from Cork, he determined to pay him a visit, and had no doubt of obtaining all the assistance he wanted. On the way to his friend's house he met with a poor woman, who implored relief for herself and eight children, their father having been seized for rent and thrown into jail. Ever alive to the feelings of humanity, Oliver gave the woman all that remained of his little stock, and trusted his own necessities to the generosity of his dear friend."

Goldsmith's father having died soon after, his uncle, the Rev. T. Contarine, sent his nephew up to London to qualify himself for the legal profession, a purpose which Oliver himself thwarted by gambling away all his money and returning home penniless. After this he proceeded to Edinburgh to prepare for the medical profession, and having passed two years in the metropolis of Scotland repaired to Leyden, intending to complete his studies. Now ensued a series of the most romantic adventures and strange vicissitudes that ever man has undergone. However, as he himself has related them in his "Philosophic Vagabond," it is not necessary to enter here into any details concerning this period of his life. Suffice it to say, he at length obtained a medical degree at Padua, and returned to England in the year 1756. Arrived in London, he was for some time a chemist's assistant, then an usher in an academy at Peckham, — a post of great wretchedness and the most painful drudgery. However, a change for the better took place in Goldsmith's fortunes about this time. He was enabled, through the generosity of an old college friend, to set up in practice as a physician; but he soon gave this up, and, after failing to obtain an appointment as a hospital master, threw up the medical profession in disgust, and henceforth devoted himself entirely to literature. The extreme ease with which he wrote, the versatility of his talents, his varied and curious information, all combined to render his services most valuable to the London publishers. Hence his income must at times have been considerable; but his reckless generosity and his improvidence rendered him entirely incapable of husbanding his resources or of providing for the future. Thence his difficulties, — one day dressed like a fine gentleman, the next day in rags.

After being engaged for some time in hack work for the periodicals, he appeared as an author on his own account, and in 1761 was written the "Vicar of Wakefield," — "the finest model of fictitious composition on which the human mind was ever employed," although it was not published till five years afterwards, so little was it appreciated by its purchaser. The singular circumstances under which this inimitable novel was composed, and sold by Dr. Johnson for £60, are related in Boswell's "Life of Johnson." "I received one morning," Johnson long afterwards told Boswell, "a message from poor Goldsmith that he was in great distress, and as it was not in his power to come to me, begging that I would come to him as soon as possible. I sent him a guinea, and promised to come to him directly. I accordingly went as soon as I was dressed, and found that his landlady had arrested him for his rent, at which he was in a violent passion. I perceived that he had already changed my guinea, and had got a bottle of Madeira and a glass before him. I put the cork into the bottle, desired he would be calm, and began to talk to him of the means by which he might be extricated. He then told me that he had a novel ready for the press, which he produced to me. I looked into it and saw its merit, told the landlady I should soon return, and, having gone to a bookseller, sold it for £60. I brought Goldsmith the money, and he discharged his rent, not without rating his landlady in a high tone for using him so ill."

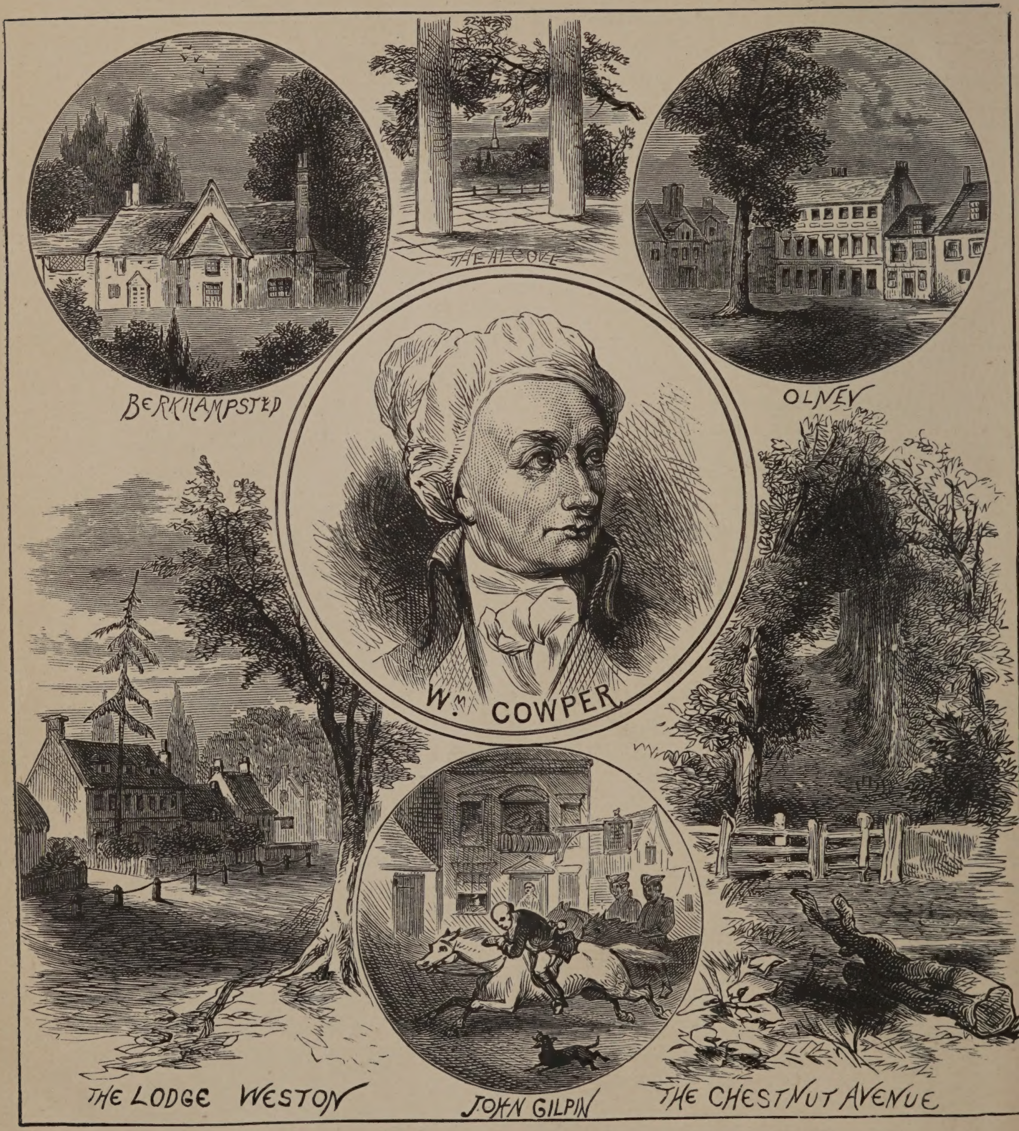
The year 1766 witnessed the production of the "Traveller," a delightful poem, which established the author's popularity and smoothed his way to the highest poetical honors. Two or three years before this had appeared his well-known work, the "Citizen of the World." The "Traveller" was followed by that pleasing ballad, the "Hermit," and the comedy of the "Good-natured Man." Goldsmith had taken great pains in the composition of this play, and had also ventured in it to differ from the popular taste. The kind of comedy most in vogue at that time was "genteel comedy" or "sentimental trash;" and the theatre managers and critics had a special horror of anything which might be considered low or too broadly farcical. Garrick, whether on this account or for other reasons, did not care about the work; but at length, after much delay, it was given into the hands of Colman, the Covent Garden manager. Colman, too, appeared in no great hurry to bring it before the public, and it was not until the 29th of January, 1768, during which period Goldsmith had been driven to his alternative of compiling to supply his immediate wants, that he had the satisfaction of seeing his comedy on the boards. One can hardly say satisfaction. Colman had been diffident of its success from the very first; the actors for the most part were cool about it; the audience during a great part of its representation exhibited the most supreme indifference. At the famous scene of the bailiffs the partisans of genteel comedy in the pit could no longer restrain themselves, and vented their disapproval in hisses and cries of "Low!" "Low!" but at the fourth scene the tide of popular favor turned, and roars of laughter were heard from every part of the theatre. Goldsmith, who was in the house with Johnson, Burke, and others, had all this time been suffering dreadfully. It was club night; but though he went when all was over and seemed in riotously high spirits, it was but make-believe. "All the while," he said, telling the story afterwards at a dinner-table, "I was undergoing horrid tortures, and verily believe that if I had put a bit into my mouth it would have strangled me on the spot, I was so excessively ill; but I made more noise than usual to cover all that, and so they never perceived my not eating, nor, I believe, at all imagined to themselves the anguish of my heart. But when all were gone except Johnson here, I burst out a-crying, and even swore that I would never write again." "All which, Doctor," said Johnson, who had been listening with amazement to this frank public confession of Goldy, "I thought had been a secret between you and me; and I am sure I would not have said a word about it for the world." The comedy might, however, be pronounced a success. It ran a due number of nights, and brought Goldsmith £300 or £400. Johnson, indeed, who had written the prologue, and stood manfully by it all through, declared that it was the best comedy that had been produced since the "Provoked Husband."

At length, in 1770, appeared his most charming poem, the "Deserted Village." Its natural elegance, simplicity, and pathos won all hearts; and the poet's genius and worth were now fully appreciated. Besides these productions, Goldsmith wrote many other works in both prose and verse, all of them distinguished by that simplicity and easy flow which is so characteristic of all his writings. In 1773 he again appeared as a dramatic author by bringing out his agreeable play, "She Stoops to Conquer," the plot of which is founded on an amusing adventure which the author himself had while travelling in Ireland, when he mistook a gentleman's house for an inn. Among our poet's last publications was a "History of the Earth and Animated Nature," a work which realized £850.

But now Goldsmith's adventures and checkered career were drawing to an end. He had for some years been suffering from a constitutional disease, induced by severe application. Being also subject to lowness of spirits, he was attacked by a nervous fever, of which he died, April 4, 1774, at the early age of forty-five. His remains were interred in the Temple burial-ground, and a marble monument was erected to his memory in Westminster Abbey, the Latin inscription on it being written by Dr. Johnson. As we gather from testimony,—

> "In person Goldsmith was short, about five feet five or six inches; strong, but not heavy in make; rather fair in complexion, with brown hair. His features were plain, but not repulsive, — certainly not so when lighted up by conversation. His manners were simple, natural, and perhaps on the whole unpolished. He was always cheerful and animated, entered with spirit into convivial society, to the enjoyments of which he contributed largely by solidity of information and the *naïveté* and originality of his character; talked often without premeditation, and laughed loudly without restraint."

Goldsmith, indeed, was one whose character it is impossible not to love, even while condemning its glaring blemishes.



WILLIAM COWPER.

When he was a man, and up to the end of his life, he possessed much of the simplicity of childhood. Both as a prose writer and as a poet he has won a name which will last as long as the English language itself.

The man speaks to us of men as men. He touches the chords of sympathy which connect man to his fellows. It may be that he is not so grand as those who have preceded or succeeded him; but he is domestic, and adorns each subject that he has touched.

WILLIAM COWPER.

[Born 1731. Died 1800.]

It would be comparatively safe to hazard a guess that for every ten Englishmen who have read Pope's version of Homer's "Iliad," not one has read Cowper's elegant translation of the same epic. There is, however, no more simple or certain method by which to demonstrate the superiority of the latter work, and to indicate the kind of influence which Cowper exercised on the poetic literature of this country, than to quote in comparison a passage from each of these great men. In the eighth book of the "Iliad" there is a description of Night, which in the original Greek extends to five lines. Pope's rendering of this description has been quoted *ad nauseam*, as a brilliant instance of grandeur and felicity of diction. Sonorous and full of color it no doubt is. But sound is not the only consideration in poetry, and the color is glaring and false. This is Pope: —

> "As when the moon, refulgent lamp of night,
> O'er heaven's clear azure spreads her sacred light;
> When not a breath disturbs the deep serene,
> And not a cloud o'ercasts the solemn scene;
> Around her throne the vivid planets roll,
> And stars unnumbered gild the glowing pole;

O'er the dark trees a yellower verdure shed,
And tipt with silver every mountain's head;
Then shine the vales, the rocks in prospect rise,
A flood of glory bursts from all the skies;
The conscious swains, rejoicing in the sight,
Eye the blue vault and bless the useful light."

Here, indeed, is a description of night such as is not justified by any manual of astronomy in the world, and which does the greatest violence to the simple dignity of the original. Cowper's translation of the same passage is as follows: —

"As when around the clear bright moon the stars
Shine in full splendor, and the winds are hushed,
The groves, the mountain-tops, the headland heights,
Stand all apparent; not a vapor streaks
The boundless blue, but æther opened wide
All glitters, and the shepherd's heart is cheered."[1]

No amount of criticism could more satisfactorily denote the poetic position of Cowper than this comparison. His history marks the commencement of a literary reform. He led the way for the Wordsworth of a later time. Chaste, refined, but forcible, his style was utterly opposed to the artificial in verse. About his descriptions there is nothing tawdry, about his sentiment nothing mawkish, about his ethics nothing offensive. Daphne and Chloe had been piped to in neatly turned odes. Cowper finds at home a theme as inspiring as any in the classical dictionaries, and his "Verses to his Mother's Picture" will ever be ranked by critics of taste as one of the most exquisite and pathetic compositions in the language. Other poets found subjects for their wit in topics and persons of the hour, and these ballads smelt of the coffee-house and the green-room.

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[1] This passage has been translated by Tennyson as follows: —

"As when in heaven the stars about the moon
Look beautiful, when all the winds are laid,
And every height comes out, and jutting peak
And valley, and the immeasurable heavens
Break open to the highest, and all the stars
Shine, and the shepherd gladdens in his heart."

But the simple story of John Gilpin will survive hundreds of the smartest satires that ever tickled the town.

William Cowper was born in the year 1731. His father was the Rev. Dr. John Cowper, a royal chaplain and rector of Great Berkhampstead, in Hertfordshire, at which place the subject of this biography saw the light. The grandfather of the future poet was a judge, and his great-uncle was a Lord Chancellor, — circumstances which, no doubt, suggested the law as the most likely profession for William. Patronage in those days was a family virtue largely exercised, and if the author of the "Task" had exhibited any particular aptitude for his profession he would, no doubt, have happened upon some of the prizes so eagerly desired by men of law. To his early training the student must turn for the cause of that pathos, chastity, and religion conspicuous in his compositions. Young Cowper's early tutor was his mother. At her knee he learned the infinite beauty of a pure life; from her lips he received the first principles of morality. When he was only six years of age a darkness fell upon his life. His mother died, and a permanent sadness became one of his most noticeable characteristics.

Swift upon this terrible blow followed another. Shortly after his bereavement he was sent to a boarding-school in Market Street. Here he was handed over to the tender mercies of an older boy, who for two years brutally ill-treated him, and to the sadness occasioned by the death of his mother added a nervousness which became part of his nature, and which eventually developed into the awful malady which first attacked him in 1763, and at intervals fell upon him till

> "God's finger touched him and he slept."

From the Market Street academy and the brutal persecution of a bully he was in the fulness of time transferred to Westminster School, and, having spent seven years at that seat of learning, he entered an attorney's office, willing to be inducted into the involved mysteries of the law. In this office he had for fellow apprentice a youth named Thurlow, thereafter Lord High Chancellor of England.

In 1754 Cowper was called to the bar, became enamored of life in the Temple, joined a club, and eventually fell in love with his cousin, — a passion which had an unfortunate issue, and developed that morbid timidity which was originally created by his early misfortunes. The influence of his legal relatives obtained for him a clerkship in the Lords; but the excessive timidity with which he was afflicted led him to regard with terror the idea of his examination, and while preparing himself for this ordeal the fatal curse of insanity fell upon him. The "sweet bells jangled out of tune, and harsh." He was confined in a private madhouse for a year and a half. His was a religious mania, taking the form of a dread of death, — a certain looking for of judgment. This is the saddest episode in this sad career. Four times the awful shadow fell upon the ill-fated man at varying intervals and lasting for greater or lesser periods.

On his recovery from the initial attack of insanity it was Cowper's great good fortune to become intimate with a clergyman's family at Huntingdon. The cheerful influence of the Unwins, the home feeling which he experienced in this dwelling, ameliorated his pains, and he continued to reside with them after the demise of the head of the house. But after a peaceful interval the awful malady returned, and for three years his reason remained under a cloud. It was on his recovery from this attack that he set himself to the serious business of versifying. Those who, putting a strained meaning upon the dictum of Horace — "poeta nascitur non fit" — would have the true poet utter poems in his teens, would no doubt be inclined to sneer at the bard who commenced his profession at the age of fifty. The precocious Pope, we know, at the age of twelve philosophically warbled, —

"Happy the man whose wish and care
A few paternal acres bound."

But the spirit of the child was in Cowper, and his compositions are as perfect as if he had spent a lengthened apprenticeship to the art. His first efforts were recognized by no less an authority than Dr. Samuel Johnson, and there was nothing now for it but to become poet by profession. But the terrible disorder again asserted itself, and, tended by kind friends, the old man's spirit was released on the 25th of April, 1800.

Any exhaustive description of his works would be out of place here. His satires, "Truth," "Table Talk," "Expostulation," and other poems were chiefly composed in pentameter rhymes. His famous work, the "Task," was suggested to him by Lady Austin, and will forever remain a monument of his power. This was followed by the "Garden," the "Winter Evening," the "Winter Morning Walk," the "Winter Walk at Noon," compositions which for accuracy of description and daintiness of touch are quite without rivals. With the "Task" was published "Tirocinium," a poem in which the iniquities of public schools are set forth. In 1791 appeared the author's translation of Homer; and a posthumous little poem called the "Castaway" makes the sum of his contributions to English literature, which he greatly enriched.

Although the service rendered by Cowper to English literature was great and peculiar, it is not altogether owing to his literary labors that he is included in this gallery of benefactors. He was an active philanthropist. His influence was naturally great among the more seriously minded of his countrymen. Where there were peaceful, godly families, charitably disposed, and taking part in movements of social reform, by those families he was honored as the favorite bard. This influence, accidentally acquired it may be, was thrown by the poet into the great cause of humanity. It was he who sang the wrongs of the slave; and those who enthusiastically supported the efforts of Wilberforce found adequate expression in the polished verse of Cowper. Any estimate of Cowper, therefore, which confines itself to literary criticism is necessarily inadequate. An earnest and indefatigable lover of his species, he gave his moral support to every institution which had for its object the elevation of the masses, the suppression of wrong, or the amelioration of pain. When he sang to "charity," he celebrated that which was the chief component of his own nature.

"Who seeks to praise them, and to make them known
To other hearts, must have them in his own."

His works are a reflex of all that is best in man's nature. His philosophy is that of a Christian philanthropist.

William Cowper must ever be recognized as one of the most notable figures of his time, whether we have regard to the extent of his influence, the purity of his mind, the singularity of his misfortune, or the quality of his genius.

HANNAH MORE.

[Born 1745. Died 1833.]

ALTHOUGH the present century has been remarkable for the number of women who have joined the band of those whose lives are spent in efforts to ameliorate the condition of their fellow creatures, not one has arisen whose work and influence can be said to have eclipsed the name of Hannah More, — a name which still remains a household word, even with those who take but little interest in the works of charity and benevolence which have made that name so familiar.

The youngest but one of five daughters, Hannah More was born at Stapleton, near Bristol, in 1745. Her father a schoolmaster, and her sisters also conducting a school, she acquired her education under home influence; and so early did she attain extraordinary proficiency in her studies, that her father, as he expressed himself, became frightened at his own success. At sixteen years of age she attracted the notice of Mr. Sheridan, who much admired the dawning and budding genius of the talented and amiable girl. It was at this time also that she commenced her career as an authoress; and so well received and appreciated were her literary productions, that Dr. Johnson, on her introduction to him a few years later, accosted her by repeating a verse from a Morning Hymn of her own writing. About this time her tender and delicate mind received a shock

HANNAH MORE.

which it was feared would imbitter the future course of her life; but fortunately this did not happen. A gentleman who was in every way worthy of her had gained her affections and the promise of her hand. The marriage day was fixed, but for some reasons which have never been explained the gentleman receded from his promise. It is but fair, however, to state that he subsequently renewed his offer, and on being refused made all the reparation in his power by securing to her (contrary to her wishes and without her knowledge at the time) an annual sum sufficient to enable her to devote herself to literary pursuits.

At the house of Sir Joshua Reynolds, an early friend, she became acquainted with all the leading and celebrated characters of the day, and by these her talents were duly appreciated; but applause and admiration caused no change in the natural simplicity of her manners. She still retained her usual amiability, — a quality which had been from childhood the most noticeable feature in her character.

The unexpected death of Garrick, with whom and Mrs. Garrick she passed much of her time when in London, made such an impression upon her mind that Hannah More's better feelings were aroused, and she determined thenceforward to devote to her Maker's service the splendid talents with which He had endowed her.

Her Essays soon after made their appearance, and several poems quickly succeeded, all of them attracting general attention. The genuine characteristics of her mind began now to display themselves, and, wearied with scenes of gayety, she longed for the tranquillity of retirement; and with this view she removed to a residence near Bristol, spending only a portion of the year in London.

From this retirement she sent forth several works having for their object the improvement in the manners and conduct of those in high places. That entitled "An Estimate of the Religion of the Fashionable World" produced a very great effect. In it she has expatiated in a very free manner on the prevailing corruptions, the absence of religion from the education of the higher classes, and has shown how much the conduct and manners of the poorer classes are affected by the example of those above them.

In 1789 Hannah More's sisters retired from the school they had so long conducted, and for the remainder of their lives devoted themselves and their means to furthering the efforts of their talented sister in establishing schools for the poor in the neighborhood of their home. The deplorable ignorance and depravity of the poor at that time we can now scarcely realize, neither can we understand that, in their first attempts to establish a school, these ladies should have met with resistance from the wealthier portion of the community. The first school was opened at Cheddar; and so successful was it that Mrs. More was encouraged to set up others in the neighborhood, and many were established, some of them at a considerable distance from her residence. The schools, and the various clubs which were established in connection with them in the different villages, were continually visited by Hannah More and sisters; and such were the fruits of their labors, that even those who had been most bitter in their persecution were fain to admit that a reformation had been effected in a district previously notorious for its almost heathenish degradation and vice.

Notwithstanding the time and attention which this work entailed upon her, Hannah More still continued her literary labors. To counteract the revolutionary principles which were spreading amongst the lower classes towards the close of the last century, a series of tracts were written by her, notably a little work entitled "Village Politics." This, and others of similar import were gladly received, and the Government of the day distributed thousands of copies throughout the country.

It is impossible here to enumerate the many works which proceeded from her pen; but there is one which, although of a different nature from her usual productions, will always be associated with her name. This is entitled "Cælebs in Search of a Wife." So extraordinary was the popularity of this work, that eleven editions passed through the press within nine months after its first publication.

Goodchild's Little Library.
Early Lessons
Harry & Lucy
A.S. BARNARD.

MARIA EDGEWORTH.

From her writings Hannah More obtained a considerable income, but all was devoted to the charitable work which she had undertaken; indeed, her beneficence was such, that some few years before her death her means were so reduced that it was necessary for her to dispose of her little estate, known as Barley Wood. To do this was a great trial, as her home there had become endeared to her by the remembrance of past scenes. The death-place of all her sisters, it had been her wish that in it she also might end her days.

Her health, which had long been precarious, began soon after to fail. A year before her death her faculties also became dimmed, and at Clifton, on the 7th of September, 1833, she quietly and calmly breathed her last.

Mrs. More, who was in her eighty-ninth year when she died, must be acknowledged as one of the most illustrious of Englishwomen. To splendid talents were united excellent sense, and a piety which showed its genuine nature in the universal beneficence which characterized her useful life. Prayer was with her to the last; and when her memory had failed her in other respects, she could remember and frequently repeated portions of Scripture, and particularly those which had sustained her during her long and meritorious life.

MARIA EDGEWORTH.

[Born 1767. Died 1849.]

AMONG those women whose works have gained for them a position in the literary annals of their country, and who by the purity of their writings have contributed much to the moral and intellectual well-being of their readers, the name of Maria Edgeworth stands prominently forth.

This gifted lady was the daughter, by his first wife, of Richard Lovell Edgeworth, of Edgeworthstown, County Longford, Ireland. She was born at Hare Hatch, Berkshire, in the year 1767. In 1782, when Maria was about fifteen years old, the family returned to Ireland, where, with the exception of a few occasional visits to England, Scotland, and France, she resided for the remainder of her long and useful life. Her education was personally conducted by her father, who enthusiastically devoted himself to the intellectual improvement of all his children. The neighborhood of Edgeworthstown did not afford much congenial society, the only persons they visited being the Earl of Longford, at Pakenham Hall, the Earl of Granard, at Castle Forbes, and a Mr. Brookes. Pakenham Hall was twelve miles distant, with, as she herself informs us, "a Serbonian bog between, an awkward ferry, and a country so forlorn with yellow woods that it was aptly called by Mrs. Greville 'the yellow dwarf's country.'"

Miss Edgeworth quickly displayed signs of unusual genius, and at an early age was selected by her father as his business factotum, while his office of magistrate enabled her to obtain great insight into the native character, and to study more closely the peasant life around her.

In most of her literary productions she had the advantage of her father's criticism. He was accustomed to observe, "It is my business to cut and correct; yours to write on."

The first effort of her pen, entitled "Essays on Practical Education," was published in 1798. This work was the joint production of father and daughter. In 1801 there followed "Castle Rackrent," by which her fame as a national novelist was firmly established. The book is distinguished throughout for rollicking Irish humor, sound sense, and powerful delineations of character. In it we find Sir Condy lamenting that "he was very ill-used by the Government about a place which had been promised him, but never given, after his supporting them against his conscience most *honorably*."

"Belinda" and the "Essay on Irish Bulls" appeared soon after. The latter was written with the object of making English readers familiar with Irish humor and pathos. In this work also she had the assistance of her father's pen. Indeed, it is so evident that two minds were employed in its production that Miss Edgeworth, in writing her father's memoirs, confesses her inability to distinguish which were his, but adds that passages in which there are allusions to or quotations from the classics must be his, as she was "totally ignorant of the learned languages."

From 1803 to 1806 she gave to the world "Belinda," "Popular Tales," and "Leonora," which has a rather painful plot.

The first series of "Fashionable Tales" appeared in 1809, and were complete in 1812. These included "Ennui," the "Dun," "Manœuvring," "Almeria," "Vivian," the "Absentee," "Madame de Fleury," and "Emilie de Coulanges." Among the best and most successful of the tales were "Ennui," and the "Absentee."

"Ennui" is a most powerfully written novel. None other than a master hand could have portrayed such characters as "M'Leod, the cool and faithful Scotch agent, witty Lady Geraldine, Christy, the blacksmith, Ellinor, the Irish foster nurse, who on one occasion remarked that 'if it pleased God she would like to die on Christmas day of all days, because the gates of heaven they say are open all that day, and who knows but a body might slip in *unknownst?*'"

In the "Dun" is depicted, almost too painfully, the miseries which the poor suffer from their inability to obtain the money justly their due. The chief figure in "Manœuvring" is Mrs. Beaumont, a clever scheming woman who attempts to marry her two children against their inclinations. All seems for a time to prosper with her, but in the end she is thoroughly outwitted, and all her petty deceit exposed. "Almeria" shows the debasing consequences produced by the passionate pursuit of fashion for its own sake, unredeemed by any ennobling feature. "Vivian" illustrates the terrible evil sometimes caused by indecision of character. Vivian, the undecided, brilliant young noble; Russel, the faithful tutor; Wharton, the unscrupulous politician; self-willed Lord Glistonbury; prim Lady Glistonbury; and vivacious Lady Julia, — seem to start from the canvas.

But the "Absentee" is considered by most judges to be Miss

Edgeworth's master-piece. Lord Macaulay observed that the scene in which Lord Colambre discovers himself to his father's tenants was "the best thing of its kind since the beginning of the twenty-second book of the 'Odyssey.'" While speaking of this work it will not be inappropriate to introduce a story which is told of the authoress. Miss Edgeworth was one afternoon making tea for her father. After allowing the liquid to "draw" for the requisite period of time, she proceeded to remove the cosey and to pour out a cupful for her father. To her intense astonishment pure water, without the slightest suspicion of the fragrant congou, issued from the spout of the teapot. "Ha, ha! Maria," laughed Mr. Edgeworth, "there's another of your Irish bulls." "No, father," she quickly replied, "it's only *absentee*." "Madame de Fleury" was a French lady who established a school in Paris for neglected girls. Forced, on account of the Revolution, to take refuge in England, she was there maintained by her former pupils and was eventually enabled to return to France. "Emilie de Coulanges," a rather dry and uninteresting story, describes the lives led by two French refugees with Mrs. Somer, a lady afflicted with a very bad temper, yet with a kind heart at bottom.

In 1814 she produced "Patronage," which was followed soon after by "Harrington," "Ormond," and "Comic Dramas," the last failing on the stage.

"Ormond," an Irish tale, can vie with any of Miss Edgeworth's novels for general excellence. We read in it how a youth of naturally passionate temper and of neglected education eventually attained a true nobility of character. "King Corny," "Ormond," "Sir Ulick O'Shane," "Moriarty Carroll," "Dora," "Mansell O'Faley," are the work of a master hand.

In 1820, by the death of her father, Miss Edgeworth was summoned from novel-writing to fulfil the sacred duty of completing his memoirs.

A short time after this she paid a visit to Sir Walter Scott at Abbotsford, where she remained for a fortnight. This visit was returned by the celebrated novelist exactly two years afterwards.

In 1834 she published "Helen," a novel of thrilling interest, in which she shows more maturity of judgment and greater knowledge of the different passions of the human mind than in any of her previous books. She manifested great interest in a correspondence which had, some years previously, taken place between her father and Thomas Day, as to the propriety of ladies engaging in literary work, in which the latter stoutly maintained the opposition. It was for the purpose of answering his objections and confuting his arguments that she published the work entitled "Letters for Literary Ladies." Miss Edgeworth's tales for children have met with well-deserved commendation. They include "Rosamond," "Harry and Lucy," and "Orlandino."

She was on terms of the greatest intimacy with the most distinguished of her contemporaries. Scott entertained a feeling of the highest regard for her, and is reported to have expressed a desire to do the same for Scotland as Miss Edgeworth had done for Ireland. O'Connell lamented that a woman possessing so great influence did not serve Ireland as an agitator. Byron, in spite of his caustic remark about "Miss Edgeworth's novels stepping from their covers," greatly admired her writings. "And Lord Macaulay was one of her most enthusiastic worshippers." "Among all the instances connected with the publication of his history," says Mr. Trevelyan, "nothing pleased Macaulay better than the gratification he contrived to give Maria Edgeworth, as a small return for the enjoyment which during a period of more than forty years he had derived from her charming writings."

So great, indeed, was his admiration for her, that in his history he mentioned her in a note, in which he characterizes her delineation of King Corny in "Ormond" as "that admirable portrait." How gratifying the praise of so great a writer must have been to Miss Edgeworth is shown in a letter written a short time afterwards to an intimate friend, in which she speaks of "the self-satisfaction, vanity, pride, surprise, I had in finding my own name in a note." This highly talented and amiable woman peacefully departed this life May 21, 1849, after having lived to see her works obtain a place in the first ranks of English literature.

Miss Edgeworth's novels are distinguished for the genial humor which runs through them, for sobriety of judgment, for the vivacious and perfectly natural dialogues which are introduced, and above all for the admirably drawn character studies with which all her works abound. Some critics have found fault with her novels as being too didactic to please as fiction should please. But Miss Edgeworth was professedly a moral writer, and never if possible let slip an opportunity of enforcing on the reader's attention some important moral precept.

As a national novelist and a depictor of the more humble phases of life she yields the palm to Sir Walter Scott only; while as a practical moral teacher she stands alone among novelists. And last but not least among the many qualities which claim for her a right to be considered as a public benefactor are her noble and pure character, her kindness of heart, ever keenly alive to the call of suffering humanity, and the numerous domestic virtues which brightened and adorned the peaceful and happy home of which she was the centre.

WALTER SCOTT.

[BORN 1771. DIED 1832.]

ALTHOUGH the novels of the latter end of the last century often displayed abilities of the highest order in construction, in individuality, and in dramatic power, yet they were tinged with a tone of immorality which has almost consigned them to oblivion except to the student of literature. Fielding and Smollett's works (with others) are seldom or never found now on the ordinary family book-shelves. It is only with regard to the GOOD qualities they developed, mentioned above, that they are even acceptable to the student. Between the

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time of which we speak and the appearance of the novel of "Waverley," the novel of the period was but a poor affair,—poor in fact in every respect, generally weak in plot and in construction,—and, to use a common expression, the work was but twaddle.

Walter Scott, the son of a writer to the signet, which is equivalent to being an attorney in England, was born in Edinburgh in 1771, and, having received a good education, was himself in 1792 made an advocate of the Scottish bar. His father was able to allow him a handsome income, and he began life in a style very different from the starting of the typical poet. But he made no progress in his own profession. The law had no fascination for him, and the wonder is that it has any fascination for anybody.

Although an eloquent speaker he had not a forensic mind, and having, in 1799, through the powerful influence of the Duke of Buccleugh, obtained the Crown Office appointment of Sheriff of Selkirkshire, to which was attached the salary of £300 per year, he devoted his attention to literature.

He had reached nearly his twenty-fifth year before he showed any of those talents which eventually distinguished him as the leading writer of his age. He himself says that during the last ten years of the eighteenth century poetry had fallen to a very low level, and he describes the wonderful excitement produced in literary circles by some translations of the German ballad school, especially of Bürger's "Leonore," and also the effect of them on his own mind. He resolved to "rush into print," and accordingly produced in 1796 some German translations and the "Wild Huntsman" in a thin quarto volume, which, like a great many first attempts, failed. But, like numberless other brave men who fail at first, he again wooed the muses, and after the publication of some small poems gave to the world the "Minstrelsy of the Border," the work which stamped him as a genius and as an excellent practical antiquary.

This work was followed in 1805 by the celebrated poem, the "Lay of the Last Minstrel." Its originality, poetical beauty, and great power produced a wonderful effect on the public mind. After this he published a series of poems, commencing with "Marmion" and finishing with "Harold the Dauntless."

It was not until 1814 that the appearance of "Waverley" marked an event in the era of literature. Coming after the weak fashionable novel of the period, its free, graceful, natural, and manly style caused a deep sensation. As is well known, it was published anonymously; and for some years afterwards "By the author of 'Waverley'" was on the titlepage of his novels. He produced them with astonishing rapidity, — as many as six or seven volumes annually; and the even greatness of the talent displayed in them is simply marvellous, let alone the grandeur of the construction and the dramatic force of the characters. The beauties of descriptions and the thorough naturalness displayed all through are the charms and beauties that have endeared his works to so many thousands of readers.

He rose rapidly to wealth and fame. He was created in 1820 a baronet of the United Kingdom. He was surrounded by every earthly happiness it seems possible to enjoy, beloved in his domestic circle, adored by the peasantry, and standing on the proud pinnacle of fame. But there came a cruel change. In 1826 his principal publishers, Messrs. Constable and Company, failed for an immense sum. It then became known that the great author was deeply involved to the amount of £120,000, by bill and other transactions with Messrs. Constable, of which barely half was incurred by himself. To his undying honor he undertook to pay off this immense debt without any deduction. He refused at the meeting of the creditors to accept any compromise, and declared that if life and health were spared him he would meet the amount to the uttermost shilling. He insured his life in the favor of the estate for upwards of £20,000, realized all the property he could (including the sale of his town house), then grappled with the Herculean task to sweep away the enormous debt. To add to his cup of sorrow, a month after the crash his wife was taken from him.

For five or six years following the calamity did Sir Walter Scott continue his enormous labors, sending to the reading world eight or nine romances, the "Life of Napoleon," "History of Scotland," "Tales of my Grandfather," "Letters on Demonology," etc. The profits on these were so great, that in 1830 more than £54,000 of the debt had been paid off. But the mental tension produced by the enormous exertion began to tell on even his robust frame; his hair turned as white as snow, he became dejected, slight paralysis set in, and the springs of life began to give way. During 1831 he grew worse, and all mental exertion was forbidden. He was then ordered by his medical attendants to travel on the Continent. In the autumn of this year he sailed for Malta, but he was very loath to leave his beloved Scotland. The voyage produced favorable results; but after visiting Rome and Naples his intense longing for his native land was so great that he hurried home rapidly. But in his then state of health the haste with which he travelled was highly injurious. He had a severe attack of his disease in passing down the Rhine.

Medical aid was of no avail. His ardent dying wish was to see once more his favorite Abbotsford. He was conveyed there on the 11th of July, 1832, but was in such a pitiable condition that he no longer recognized those dear to him. He lingered in this state until the 21st of September, 1832, when he expired without a struggle.

Thus died the great and good Walter Scott, whose pen has given and will give delight and instruction to thousands. Always pure, high-minded, and true to nature, his works can be placed in the hands of the youth of both sexes with advantage. There can be no doubt that his poems swept away the interminable nonsense anent Phillis and Chloe, and his novels the coarseness that disgraced the fictions of the last century.

ROBERT SOUTHEY.

[Born 1774. Died 1843.]

ROBERT SOUTHEY was born at Bristol on the 12th of August, 1774. His parents, descended from good families of the county of Somerset, appear to have found it difficult to get on in the world, and the care and education of their son Robert was in consequence undertaken by his mother's maiden aunt, Miss Tyler.

Of this lady Southey has, in his autobiography, given us a very interesting sketch. She appears to have been quite a celebrity in Bristol on account of her eccentricities and her passion for theatres and actors. To her Robert Southey was indebted for his familiarity with the drama, and very early in his boyhood he had read through Shakspeare and Beaumont and Fletcher. Even before going to Westminster School, which he entered in his fourteenth year, we find that so ardent was he in the pursuit of knowledge that he had mastered Spenser, and, through translations, Tasso and Ariosto, Ovid and Homer. Proceeding to Westminster School in 1787, Southey remained there four years, and was then dismissed, owing to a contribution from his pen which appeared in a small publication set on foot by the boys.

During his stay he formed some lifelong friendships, and to one, that with Mr. C. W. Wynn, Southey was indebted for an annuity for many years, until, in fact, provision was made for him by the Government.

To the kindness of a maternal uncle he was indebted for the means of proceeding to the University of Oxford; and he entered Balliol in 1793, the uncle's intention being that he should enter the Church. Southey's religious opinions were, however, not sufficiently decided to justify this, and he appears

ROBERT SOUTHEY.

his courage and perseverance never deserted him, and he religiously believed that future generations would recognize his talents.

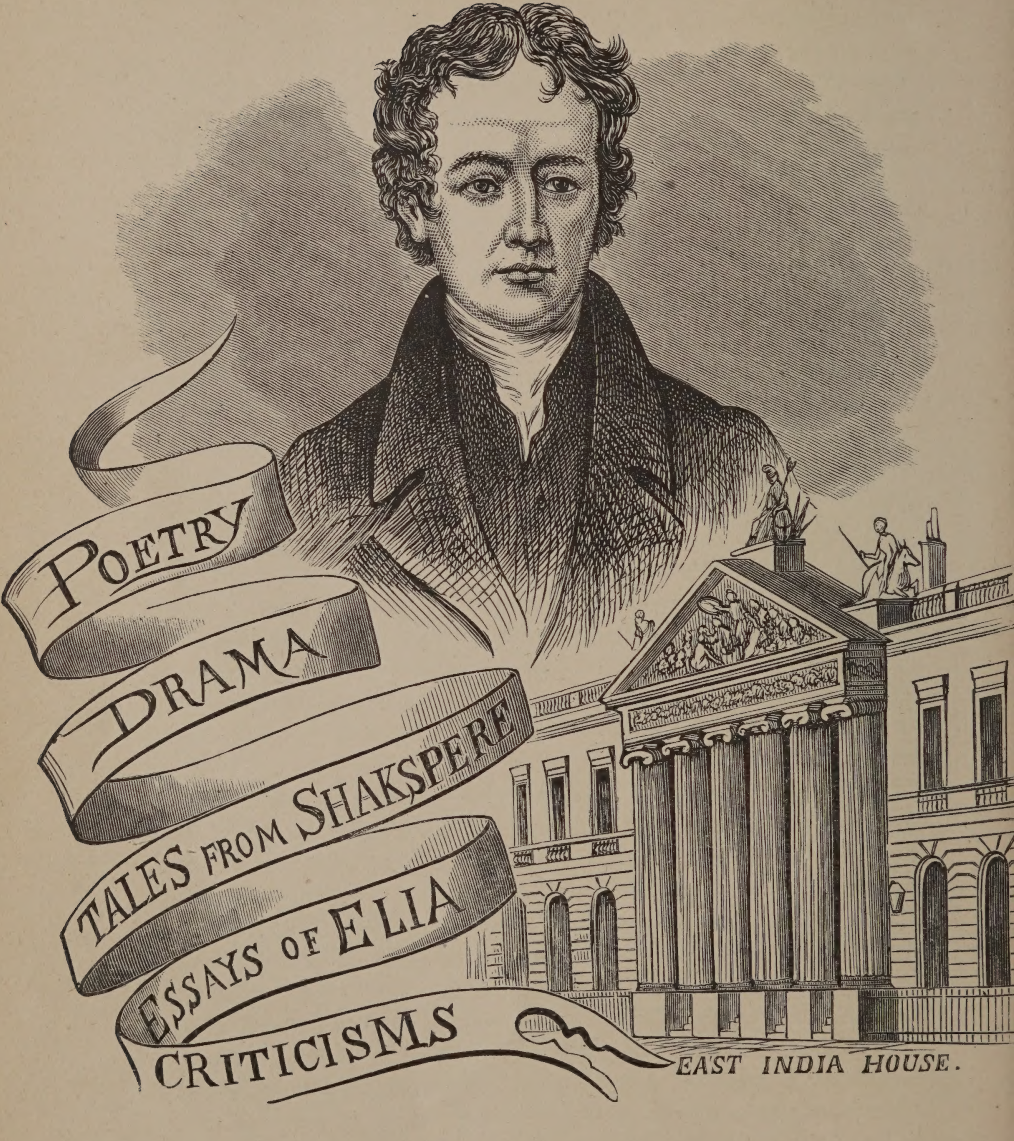
In 1807 he produced "Specimens of the Later English Poets" and "Palmerin of England;" but his increased earnings were now devoted to the relief and maintenance of his wife's sister and her children. The wife and children of Coleridge also found a sanctuary in Southey's home; and many were the gifts to the unfortunate in the world of literature.

In 1813, on the death of Mr. Pye, the offer of the post of poet-laureate was, on Scott's suggestion, made to Southey, and by him accepted.

For the remainder of his life the labor of Southey was incessant, but by degrees the happiness of his home was departing. First he loses a favorite child; then his wife, to whom he was so devoted, was placed in a lunatic asylum. While suffering under this trying affliction he was offered a baronetcy by Sir Robert Peel, but the distinction was declined.

In 1837 his beloved wife, who had returned to her home, died. After this Southey became an altered man. He says: "There is no one to partake with me the recollections of the best and happiest portions of my life, and for that reason such recollections must be painful except when I connect them with the prospect of futurity." To divert his mind he made a trip to the Continent, and in 1839 again married; but he never recovered the loss of his wife Edith. After that event all about him saw that his faculties had lost their vigor, and that a melancholy decline had taken possession of him. Forty-five years of incessant toil had done its work, and his life for a year before his death was a mental blank. He died on the 21st of March, 1843, and was buried in Crossthwaite Churchyard, where lie his beloved Edith and the children that preceded him.

The socialistic and Utopian ideas which had marked Southey's early life were abandoned long before his death, and he appears to have become thoroughly conservative in his opinions. His life has been described as a picture, the first sight of which elicits boundless satisfaction, frequent inspection



CHARLES LAMB.

qualifies delight, and a last parting look would seem to justify the early admiration. Commenting upon Southey's industry and generosity, another able writer has well said: "If biography be not utterly worthless, these illustrations of his character have an inestimable value. Look at him, pen in hand, the indefatigable laborer in his literary seclusion, with no inheritance but a vigorous intellect, no revenue but such as his industry might furnish, perfect in the relation of husband, brother, father, friend; by his chosen labors delighting the world, as well as ministering to the happiness of his needy circle. Look, we say, and confess that heroism is here which conquerors might envy."

CHARLES LAMB.

[Born 1775. Died 1834.]

IN the National Portrait Gallery at South Kensington are three very remarkable portraits side by side. One is of a young man with a noticeable weakness of chin and extreme mobility of expression. Next to this hangs one of a "cast of face slightly Jewish," a rather delicately formed aquiline nose, and a somewhat prominent or, as it is often familiarly called, old-fashioned chin; and next to this a face of a mould decidedly reminding the spectator of those ancient and remarkable people called Aztecs. The forehead is fairly developed, though somewhat retreating, the nose enormous but well-shaped, and the lips prominent and sensitive. They are the portraits of three intimate friends: the first, Samuel Taylor Coleridge; the last, Robert Southey; the middle one, Charles Lamb. They are taken at ages varying from twenty-three to twenty-eight, all young, all already known in the literary world. Few men of the time made a deeper or more lasting impression upon literature; none attained a securer place in the affectionate regard of their readers.

Charles Lamb, as he is always familiarly called, was born in the Inner Temple, on the 18th of February, 1775; the particular locality was Crown Office Row. He was the youngest child of John and Elizabeth Lamb. John Lamb the elder (Charles had a brother John) was clerk and factotum to a Mr. Salt, a bencher, and was to a certain limited extent a literary character. A volume of "Poetical Pieces" was almost the only production of his starveling muse; for what could a poor lawyer's writer do in dealing with wealthy publishers, or in calling the attention and criticism of a fastidious public? Fortunately for Charles, when a child of seven he received a presentation to Christ's Hospital, so often the nursery of happy literary friendships, and there he remained for seven years. He had a defect in his speech, in reality a slight stammer, not painful, but sufficient to prevent his success as an exhibitioner. In his own brief autobiography, published among the "Last Essays of Elia," he says of himself that he "stammers abominably, and is therefore more apt to discharge his occasional conversation in a quaint aphorism or a poor quibble than in set and edifying speeches; has consequently been libelled as a person always aiming at wit, which, as he told a dull fellow that charged him with it, is at least as good as aiming at dulness."

When Charles was still a boy, he and his sister Mary, who was ten years his senior, were allowed free access to Mr. Salt's library, which must have been particularly rich in old English authors, as Charles Lamb's early reading certainly gave the bias to his whole life. The taste for poetry and the drama thus fostered was further strengthened by his boyish friendship for his schoolfellow Coleridge, whom he used to speak of as "the inspired charity boy." Coleridge was two years older than Lamb; and when the latter was transferred from Christ's Hospital to a clerkship at the old South Sea House, the former removed to Cambridge. Of the old South Sea House itself a description in Lamb's own gossiping style is given in the commencing Essays of that series which first appeared in the "London Magazine" about 1820, and soon became world-famous as the "Essays of Elia." Lamb did not hold his first appointment more than two years, at the end of which time, through the kindly influence of his father's employer, Mr. Salt, he obtained a clerkship in the East India House, Leadenhall Street. This became the long occupation of his life, until after many years he retired upon a pension. But he never liked his work. The circumstances of his position necessitated his keeping to it, and he faithfully performed all his business duties. What literary recreation he had was always taken at home after office hours.

Now and then a visit from Coleridge would brighten the brief moments between work and bedtime, and the two enthusiasts would retire to a tavern in Newgate Street, where they used to smoke and talk *de omnibus rebus et quibusdam aliis*. If the Thames had been inflammable, their intentions were certainly ardent enough to have set it on fire. But we must wait a little for the crisis of their Utopian schemes. Four or five years afterwards, when Southey had joined them, their projects became very remarkable. But to the credit of the others it must be admitted that whatever of visionary and unpractical occurred in their plans, its origin could always be traced to the metaphysical brain of Coleridge. Southey was ever intensely practical, however poetic or sentimental his writings may seem to be; and Lamb had that keen sense of humor which utterly prevented him from seriously contemplating the wonderful schemes projected by Coleridge as anything but thoroughly amusing subjects of conversation. All the world knows how Coleridge could talk. But in some degree the satire contained in the famous epitaph on Charles II. was true of this noble-minded but unpractical dreamer. It might be said with equal truth of him that he "never said a foolish thing," but not that "he never did a wise one." Like many another man whose soul was divinely touched, he was imprudent in worldly matters; but no one ever accused him of immorality. Probably Lamb's weaknesses would have been less conspicuous but for the tinge of hereditary insanity which hung over the family. A brief period of mental aberration led to his confinement in an asylum at Hoxton; but before he left he was again thoroughly himself, bright and quick-witted as ever. His sister

Mary was less fortunate. In spite of Charles's earnings and the father's little pension poverty must have crept upon the family; for soon after the appointment in Leadenhall Street we find them in an obscure lodging in Little Queen Street, Holborn. The old man was almost imbecile, and the mother bedridden and helpless. A maiden aunt assisted the family by joining her small annuity to their income and living with them, while Charles gave up the whole of his salary, except what he absolutely required, and devoted all his efforts to render the rest happy and comfortable.

The eldest brother, John, was a selfish creature, who lived by himself elsewhere, and did little or nothing to assist his afflicted parents. Mary was the mainstay of the household. Her ceaseless efforts in caring for her parents gradually undermined both bodily and mental strength; the deplorable result being the well-known tragedy which overshadowed all her brother's after life.

His imbecile father could enjoy no occupation or amusement but cribbage, to which for the sake of the old man this tender-hearted son tied himself, wearily but willingly, until death ended the self-denying task. The aunt did not long survive, and then Lamb undertook single-handed on his own slender means — at that time only £100 a year — to maintain himself and his unhappy sister, who for the first two years seemed to be always on the verge of another relapse. The verses which he wrote at this time become invested with a profound and melancholy interest when we know the circumstances under which they were composed. Some of them were inserted in the forthcoming edition of Coleridge's Poems, published in 1797 by Cottle, of Bath. In the following year Lamb and his friend Lloyd joined at a volume of "blank verse," the success of which was still more blank than the versification. The same year saw the publication of his story of "Rosamond Gray." Next came the tragedy of "John Woodvil," the noble sentiments and fine poetry of which did not save it from failure with the public. The writer, together with his friends Lloyd, Coleridge, and Southey, were ridiculed in the "Anti-Jacobin" and caricatured by Gillray. These attacks considerably increased the fame of the victims. Their portraits, taken about this time, are those already alluded to as hanging side by side at South Kensington. In 1800 Lamb went to reside in Mitre Court Buildings, in the Temple, where he wrote more verses. The publication of "John Woodvil" obtained from the Edinburgh reviewers the favor of their contempt as a "specimen of the rudest condition of the drama," and the writer of it as "a man of the age of Thespis." Lamb's ideas of dramatic composition were too high-flown and classical for the exigencies of the modern stage. It was in Mitre Court that Mary Lamb wrote those fascinating "Tales from Shakspeare," six of which were contributed by her brother; and here also Charles wrote his "Adventures of Ulysses" and his "Specimens of the Dramatic Poets who lived about the time of Shakspeare." In December, 1806, was produced at Drury Lane his farce of "Mr. H.," which turned out a most unmitigated failure. The hisses with which its *dénouement* was received were so violent that Lamb, who was sitting with his sister in the front of the pit, was carried away with the general disgust, and "hissed and hooted" as loudly as the rest.

And so wore on the life of the genial and light-hearted essayist; for it is not his poems, but those immortal "Essays of Elia," by which Lamb is destined to be remembered. Mary's oft-recurring fits of insanity were an abiding sorrow, but he made the best of his wretched fate. He always bore himself bravely against his trying circumstances, and appeared to those who knew him least a thoughtless, cheerful sort of man, who cared for nothing so much as a light and trivial jest. His Wednesday evenings were really happy times. Gathered on those merry occasions nominally to play whist, but less for play than talk, were men whose names are now historic. Among his constant visitors might be seen Wordsworth, Coleridge, Hazlitt, Godwin, and Leigh Hunt in the earlier days, and afterwards Talfourd and Tom Hood. These Wednesday gatherings remind us of the memorable dinners at the publishers of the "London Magazine," where Lamb used to meet Carlyle, De Quincey, Hood, Landor, Hare, Cunningham, Keats, Cary, and a host of others. The "London Magazine" was started in 1820, and the contributors used to meet at a monthly dinner to talk over the various business arising out of the publication. To this magazine Lamb contributed the papers by which he is best known in literature, taking the name of "Elia" from a fellow-clerk at the India House. In 1823 he went to live at Colebrook Cottage, Islington, close to the New River, whence he used to walk daily to his office in London. He was fond of long walks, and often used to indulge in them with one or other of his companions, or more commonly with a little orphan girl whom they had adopted, and called Emma Isola, who resided with them. He retired from his clerkship in 1825 on a small pension, and an allowance from the directors for himself and his sister. Another removal in 1826 took them to Enfield; but the distance from London proved a sad drawback to that social life in which Lamb was always so happy. The genial Temple gatherings were now impossible. Many are the anecdotes told of his ready wit and cheery, gentle puns.. Hood invited him to dinner, telling him that he would have one of his favorite dishes, — a hare. "And many friends?" asked Lamb. The allusion at once to Cowper and to the company was perfect in its neatness. When Leitch Ritchie visited the Lambs he was introduced to Mary, who was sitting near a window absorbed in thought. After a few moments she suddenly broke into the conversation with the question, "Charles, what has become of Hannah More?" He answered promptly, but with a slight stammer which made the pun all the more striking, "She is *not* h'any More." She was then dead.

In 1833 Lamb again removed, and went to Edmonton. In the following summer Coleridge died. A man does not lose a friend of fifty years' standing very easily. Lamb was completely stupefied with the news, and though his health did not appear to suffer, the shock must have been one that he really could not bear. He only lived six months longer. The immediate cause of death was erysipelas in the face, arising from a scratch received in falling over a stone during one of his country

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strolls. He died calmly and with perfect resignation on the 27th of December, 1834, aged fifty-nine. He lies buried with his beloved sister, who survived him many years, in Edmonton churchyard. A story of greater self-sacrifice and nobler unselfishness could not be told. He had some faults; none knew them better than himself, and they are candidly acknowledged in more than one of his essays. His place in literature no one can possibly dispute. He ranks with Addison, Steele, Temple, Shenstone, and Macaulay, and is equal to the best of them.

THOMAS CAMPBELL.

[BORN 1777. DIED 1844.]

IT is possible that there may be found some among our readers who will at first be disposed to cavil at the selection of the poet Campbell's name as that of a public benefactor. Let it be asked if those do not deserve well of their kind who enrich the language with such noble or graceful thoughts as have many of the world's poets. What men should be more highly esteemed as benefactors than such instructors, whether their appeal be directed to the heart or the intellect? Grant this, as few on reflection can fail to do, and it must be admitted how worthy of a place in this honorable list is he to whom the world owes "The Pleasures of Hope," and the British nation, more particularly, such a stirring appeal to patriotism as "Ye Mariners of England!" Campbell's battle-pieces, written during the gigantic struggle with Napoleon, did so much to arouse the patriotism of his countrymen that it was commonly said of the poet that he was "the best recruiting-sergeant in England."

Thomas Campbell was born in Glasgow on the 27th of July, 1777, in a house no longer in existence, which then stood in the High Street, but was demolished some fourteen years later in the course of improvements. He was the youngest of eleven, and eighth son of Mr. Alexander Campbell, a retired merchant who, after amassing considerable wealth in trading with Virginia, had been so reduced in circumstances by the outbreak of the American War of Independence that he was compelled to dissolve his business after paying all lawful claims, at the expense of a great part of his private fortune. This Alexander was the youngest of three brothers, and, like many other Scotchmen engaged in commerce, both before and since, came of gentle blood, his family, the Campbells of Kirnan, being lineal descendants of the first Lord of Lochawe. During the poet's lifetime the estate, which had been inherited by his eldest brother, passed out of the direct line, and was eventually sold by the possessor. Until he attained his eighth year, Thomas was indebted for his education to his mother, a woman of singularly elegant tastes and a devoted musician; much of his time was, however, spent, as he has himself noted with affectionate remembrance, under the fostering care of a stocking-weaver, Stewart by name, and his wife, in the then rural neighborhood of Pollokshaws. When eight years old he was sent to the grammar school of Glasgow, where he quickly showed unusual talents, and won the special affection of the head master, David Alison, a man whose Spartan rule has become traditional, but who seems to have been a good scholar and a capable instructor. In the October term of 1791 the youth began his college life at the University of Glasgow, of which he was afterwards to become Lord Rector with so unusual a degree of honor. It would be tedious to enter on a categorical account of his career during the next few years, marked as it was both by the distinction which he attained amongst his fellow-students, and by the arduous labors of instructing others, to which restricted means compelled him to have recourse. A few points must be noted, more especially the publication, in his first year, of the ballad "Morven and Fillan," printed for private circulation, and his successful poetical essay, descriptive of the distribution of the University prizes on May 1, 1793. About the same time the young student attempted the legal profession, and with that end in view entered the office of a relation in Glasgow, Mr. Alexander

Campbell, Writer to the Signet; he did not long continue the study, which disgusted and wearied by the dryness of its routine. More to his taste seem to have been the proceedings of certain debating clubs, where he made some figure, but of which in more mature years he spoke with sarcastic energy, especially of the one known as "The Discursive." No doubt his leanings in this direction were fostered by a visit paid to Edinburgh in the early part of 1794, during which he witnessed the trial of certain would-be reformers, whose supposed wrongs greatly fired the youth's generous imagination. Scholastic honors continued to attend him until, in his fourth college year, new disasters came upon his family, owing to the father's loss of nearly all remaining income through a chancery suit. Campbell promptly began that succor of his parents' declining years which he so nobly maintained until the decease of both. His first situation was that of tutor in the family of a connection, Mrs. Campbell of Sunipol, in the Isle of Mull. It need not be pointed out how clearly the impressions made by his surroundings at this time are to be traced throughout his works in later life. A subsequent engagement (1797) in the house of General Napier gained him a friend in his employer, who tried hard to help Campbell in the legal profession; but these kind efforts were defeated, owing to the supineness of others. At last, through the good offices of Dr. Robert Anderson, of Edinburgh, the future poet obtained literary work from Mr. Mundell, publisher of that city, and his career may be said to have been fairly begun. It was on the 27th of April, 1799, that "The Pleasures of Hope" first saw the light, and was at once recognized as a work of high merit, if not of absolute genius. Perhaps it ought to be mentioned that the excellent Mr. Mundell gave the young poet a sum of £60 for his copyright before publication. In the light of the poem's success this may not seem high remuneration, but it was not to be despised by a practically untried author. "The Pleasures of Hope," together with some smaller pieces, soon ran through several editions. On June 1, 1800, Campbell started on a tour in Germany with the intention of collecting materials for a poetical work, which was not fated to be carried out, on the achievements of Scottish worthies, living and dead. Here, during his stay in the Benedictine convent at Ratisbon, he witnessed the siege of that city by the French; after his escape his travels brought him by way of Leipsic to Hamburg, where the following winter was passed in quiet study, chiefly philosophical. Journeying had not then been made easy as in our own time, and the return to England was a tedious affair, complicated by the general hostilities which convulsed the Continent. However, on March 12, 1801, the poet sailed under convoy for Leith; but his vessel, the "Royal George," was forced to put into Yarmouth, and London was thus made his destination. Warmly received by Mr. Perry of the "Morning Chronicle," to which he had already been a contributor, and introduced to society by Lord Holland, Campbell was now in the height of popularity; but his stay in the metropolis was shortened by news of his father's death, which compelled a hasty return to Edinburgh. A notable incident in this journey to the North was the absurd accusation of high treason made against the poet on the assertions of a foreign spy: a warrant was actually issued, and it was not without some little trouble and annoyance that Campbell proved his innocence of complicity in French schemes of invasion. His fame was now firmly established, and the remainder of his life must be passed over with comparative brevity. His marriage took place (September 10, 1802), in St. Margaret's, Westminster, to his cousin, Miss Matilda Sinclair, and proved a most happy one in spite of the disapproval of some friends. His first son was born in the following year, and in 1804 the little family removed from Pimlico to a house at Sydenham. The year 1805 was signalized by the royal grant of a pension of £200 per annum, said to have been made at the instigation of Mr. Fox, who was then Minister; and the poet's circumstances were made still easier by the successful publication by subscription of his collected works. This was followed in 1809 by "Gertrude of Wyoming," placed by some foremost among his poems. It is remarkable that he himself seems to have thought more highly of "Theodoric," which is now unknown to the greater number of people, except by name. Family troubles, including the loss of his second son, and, in 1812, of his mother, checkered a brilliant life during the next few years. Campbell was also much abroad, and engaged with his great work, "Specimens of the British Poets." In 1821, by agreement with Mr. Colburn, he became editor of the "New Monthly Magazine," which owes its greatest memories to that time. His connection with the foundation of the University of London next claims attention; he was one of the most zealous promoters, and thus alone becomes entitled to the name of a public benefactor. Three times in succession (1826–27–28) was he afterwards appointed as Lord Rector of his Alma Mater in Glasgow, an unprecedented honor. In 1830 his connection with the "New Monthly" ceased, and the "Metropolitan" was started in the following year. At this period the poet's sympathy with the cause of oppressed Poland took an active form; it will be remembered how, in a famous passage of the "Pleasures of Hope,"

> "Hope for a season bade the world farewell,
> And Freedom shrieked as Kosciusko fell!"

he had commemorated that hapless struggle; and now, in 1831, Campbell followed up his early protest by action, which resulted in the formation of the Association of the Friends of Poland. The commencement of decline may be dated from the unsuccessful appearance of the "Pilgrim of Glencoe," in 1842; but the decay of a great intellect is only a painful, not a profitable, subject of contemplation. The end came peacefully at Boulogne, June 15, 1844, in the arms of his devoted niece, Miss Campbell. On June 27, the body, after lying in state for a time, was embarked for London, where, on July 3, it found a resting-place among the other great inmates of Westminster Abbey. The spot in Poet's Corner is too well known to need indication.

MRS. JAMESON.

[Born 1794. Died 1860.]

TO Anna Brownell Murphy (Mrs. Jameson) all lovers of art have particular cause to be grateful; but it is not for those works through which she is best known that she should be best remembered. The interest she took in works of art grew out of the deep interest she took in human life; her great desire ever was to lessen its sorrows and increase its beauty and happiness through its intellectual development. In writing of works of art her aim was not only to teach admiration, but to teach intelligent admiration. Especially for her own sex, she was ambitious of progress, and many were her efforts to obtain for women a wider sphere of usefulness; she wished "to free them, not from the high duties to which they are born, or the exercise of virtues on which the whole frame of social life may be said to depend, but from such trammels and disabilities, be they legal or conventional, as are manifestly injurious."

Mrs. Jameson was born in Dublin in 1794, and was the eldest daughter of a miniature painter. The means of the artist were at times somewhat limited, and Anna, a child of much originality and independence of character, early showed an earnest desire to do some work by which to help her parents, whose anxieties she had precociously the power to understand.

In the collection known as "Visits and Sketches at Home and Abroad" is a tale of Eastern life, "Faizy," written at this time; and verses have been found dated 1805, though childish, yet full of enthusiasm and hero-worship.

At the age of sixteen, well prepared by a liberal education, she took the situation of a governess in the house of the Marquis of Winchester, and realized that wish for independence and power to help others which had been the ambition of her

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childhood. In 1821 she became engaged to Mr. Robert Jameson, a young barrister. The engagement was shortly broken off for the time, and Anna again became a governess, going to Italy. It was during this journey that the diary was written which, partially revised and with a fictitious ending added that its authorship might not be known, was afterwards published as the "Diary of an Ennuyée." In it may be read at once the writer's quick perception of, and enthusiasm for, all that is beautiful, and the sadness which then possessed her life.

In 1825, the broken engagement having been renewed some time previously, Anna Murphy became Mrs. Jameson. Fanny Kemble describes Mrs. Jameson at this time as being a fair, small, delicately featured woman, with a face that was habitually refined and spiritual in its expression, yet capable of a marvellous power of concentrated feeling.

The "Loves of the Poets," the next undertaking Mrs. Jameson essayed, was commenced with much pleasure, but left incomplete, the authoress despairing of her own power to do justice to the subject, which was one that deeply interested her. The "Loves of the Poets" was followed in 1831 by "Lives of Celebrated Female Sovereigns," and that work, a year later, by "Characteristics of Shakspeare's Women," an important contribution to literature, showing such delicate perception and profound critical power as give to its author the right to be considered a very able commentator on our great dramatic poet, for whom her enthusiastic admiration was so great. This work was dedicated to her valued friend, Fanny Kemble.

In 1829 Mr. Jameson was appointed puisne judge in the island of Dominica. His prospects there, however, being uncertain, Mrs. Jameson waited till circumstances made the re-establishment of their home practicable, shortly after her husband's departure going on the Continent with her father. Of this journey a record is found in "Visits and Sketches at Home and Abroad."

In the year 1833 Mrs. Jameson again visited Germany, where she found her name, through her works, already familiar, and a kind welcome awaiting her in the highest literary and social circles, and where she made friends who were friends throughout her life, and who live before us through her vivid and genial descriptions. Especially she was interested by Tieck, the poet, critic, and novelist; Dannecker, the sculptor; Retzsch, the painter; Schlegel; and by the daughter-in-law of Goethe, Ottilie, ever afterwards so loved and so faithful a friend. The volume which was the result of this visit to Germany shows the author's gradually developing inclination towards those subjects which were the chief works of her life, and to which, as the daughter of an artist, she might be biassed by hereditary tastes. The sudden illness of her father caused Mrs. Jameson hastily to return to England. While revising these volumes, "Visits and Sketches," etc., — volumes in which there is the germ of so much to be afterwards fully expounded, — Mrs. Jameson also occupied herself in bringing before the English public Moritz Retzsch's "Fancies," a series of outline illustrations to Shakspeare, Goethe, Schiller, Burger, for which she translated the text, and for which she also wrote an introduction to the English reader.

About this time her husband, who was now established in Toronto, seemed to wish that she should join him there. Protracted uncertainty about her future and the fatigue of a tour in Southern Germany caused Mrs. Jameson an illness. Her recovery she attributes to the kind nursing of the Goethe family, who cherished her as a "pet sister." On her recovery, her husband having urgently desired her speedy departure, Mrs. Jameson, in the autumn of 1836, sailed for America, leaving the loved family who looked to her as their chief support.

A dreary winter voyage, followed by many disappointments, made Canada a sad place in her recollections. Her affections could find no home there; sad and lonely in an uncongenial place, suffering from the severe and to her unsuitable climate, she yet roused herself to take an interest in what was going on around her, while working hard in her books and studies. "The angels of art" stood by her in her solitude.

That deeply important matter, the question of education, was being discussed by the Canadian Parliament. Mrs. Jameson was anxious that opinions that had been promulgated in Europe should be known, and exerted herself for this object, but in vain; she found she could do nothing for this cause always so dear to her, and on which subject she had herself anticipated ideas now popular, and had had previsions of the manner of their execution.

Before leaving Canada Mrs. Jameson visited remote Indian settlements. Everywhere she found people who enlisted her ready sympathy. The keen observation evinced, and her animated descriptions of her adventures and impressions are delightful. These are found in "Winter Studies and Summer Rambles." The book is fertile in thought and food for thought.

Mrs. Jameson's departure from Canada to remain permanently in Europe was with the consent of her husband; to live in Canada was impossible. She returned with vanished hopes of personal happiness.

Soon after her return Mrs. Jameson again went to Germany. While there she translated the dramas of the Princess Amelia of Saxony into English, writing an introduction and notes to each drama. They were published the following year under the title of "Social Life in Germany." In 1840 Mrs. Jameson left England, intending to proceed to Italy; and again, as in 1833, returned on account of her father's failing health. She unselfishly would not leave him while her presence could in any way be serviceable to him. About this time Mrs. Jameson commenced a new book. It was the one which formed her first contribution to the literature of art. It was published in 1841, entitled the "Companion to the Galleries of Art," being a descriptive and critical catalogue of the private art collections in London. Later, Mrs. Jameson increased the reputation which this excellent work gave her by writing a "Handbook to the Public Galleries of Art in and near London."

The autumn of 1841 was spent by Mrs. Jameson in Paris, studying early art in all its forms as a preparation for the work by which her Handbook was followed, — a series of biographical notices of the early Italian painters, commencing with

Cimabue and ending with Bassano. These appeared in the "Penny Magazine," and, afterwards collected into one small volume, were very popular. The volume was translated into French in 1862 and published in Paris.

In 1845, in order to fit herself more adequately for a work she had long thought of, Mrs. Jameson went abroad. This time no call from home caused her to hasten back. Shortly after her return a collection of her fugitive papers was published. Among them is that wonderfully true picture of Venice, the "House of Titian;" also an excellent essay, "Woman's Position and Woman's Mission;" and another "On the Relation of Mothers and Governesses." This delicate subject is treated with much wisdom. These papers were among her first literary contributions to the discussion of social science. Notwithstanding that since 1842 Mrs. Jameson had been engaged on so many diverse subjects, she had also been making progress with her laborious and important work, "Sacred and Legendary Art." The first portion of the series was brought out in 1848. She describes it herself "as containing an account of the lives, legends, habits, and attributes of the sacred personages whose stories have been illustrated in the pictures and sculptures of the Middle Ages." This work was looked for with eager anticipation, long before its appearance, by all interested in the subject. Two years later the second part, entitled "Legends of the Monastic Orders," appeared; and in 1852 was published the third volume, "Legends of the Madonna." In the preface Mrs. Jameson says, "If the sphere of enjoyment in works of art has been enlarged and enlightened, I shall have done all I ever wished, all I ever hoped to do." The volumes are rich in etchings and sketches by the author and her niece of the best pictorial representations of the histories and legends given, — the progress of art is shown while its mysterious symbolical character is explained. This work brought Mrs. Jameson expressions of gratitude and pleasure from all quarters. The next book published, "A Commonplace Book of Thoughts," is divided into two parts, one bearing on ethics and character, the other on literature and art. It is full of gems of thought. The suggestions of subjects suitable for sculpture and the treatment appropriate are worthy of consideration by artists.

Early in 1851 Mrs. Jameson's friends had obtained that her name should be placed on the civil list, and in July the Queen was pleased to grant Mrs. Jameson a pension of £100 a year. Her interest in the large collection of works of art brought together in the Exhibition of 1851 was great. She undertook to write a "Guide-book to the Court of Modern Sculpture," afterwards republished in 1854.

In 1852 the education of the masses was much in her mind, more especially the bettering of the condition of the women and children of the poorer classes. She was present at the educational conference held at Birmingham; her opinion of the value of a woman's opinion on matters concerning the education and welfare of children is interesting.

In October, 1854, in the "Edinburgh Review," appeared a paper on the "Life of Haydon, by Tom Taylor," which paper has been deservedly noticed for its vigor of style and feminine delicacy of appreciation.

The year 1854 was one of great sorrow to Mrs. Jameson,—she lost the gentle mother to whom she was so tenderly attached. Later pecuniary affairs threatened to embarrass her. This fact becoming known, a number of friends, unsuspected, collected a sum wherewith an annuity was secured to Mrs. Jameson for her lifetime. The manner in which this thoughtful token of esteem was received was characteristic of a fine nature. Mrs. Jameson found it "delightful to be grateful."

In February, 1855, Mrs. Jameson was persuaded to give a lecture "privately" on "Sisters of Charity Abroad and at Home." It was afterwards printed, and excited great attention, doubtless exercising influence on one of the great questions of the day; it was an earnest endeavor to do something to emancipate women from the prejudices which had hitherto restricted the development of their finest capabilities for happiness as well as usefulness. The second lecture, the "Communion of Labor," was delivered the following year, after Mrs. Jameson's return from the Continent, where she had spent her time in visiting every hospital and charitable institution to which she could get admission, and in making comparisons, for which work her well-balanced, unprejudiced mind peculiarly fitted her.

The spring of 1852 found Mrs. Jameson again in Rome, making additions for a second edition of the "Legends of the Madonna." Later she was in Florence, writing a review of Vasari, never published. In 1859 she was again in Rome, the city she loved so dearly and knew so well, working hard but with failing strength. During this winter she had commenced her last work, the volumes that were to complete the Sacred Art Series, the "History of our Lord and of St. John the Baptist." Later in Florence, though ill, she continued her work, her "one great compensation" being the society of her dear friends Mr. and Mrs. Browning and one or two others. Afterwards she visited Dresden, then hastened home to attend the Social Science meeting at Bradford, where papers relative to the employment of women were read. Mrs. Jameson joined in the discussion that ensued, and the interest that she excited was intense; every eye was eager to see her, and every ear drank in her thoughtful, weighty words.

During the next three months, the last of her life, Mrs. Jameson was occupied on what she intended as the concluding work of her Sacred Art Series, "the crown of the undertaking," designed to show how art has tried to tell the history of our Lord. Though she much desired to do so for the sake of those dependent on her, Mrs. Jameson was not destined to finish this work.

Early in March, while returning from the British Museum, she was caught in a severe snowstorm. This exposure was followed by an attack of bronchitis, and within a week the great, gentle heart of this noble woman and earnest worker had ceased to beat. She was buried at Kensal Green by the graves of her father and mother.

THOMAS HOOD.

THOMAS HOOD.

[BORN 1799. DIED 1845.]

ON the tombstone of Hood, and in the books of the Recording Angel, are inscribed the words, "He sang the Song of the Shirt." His grave is in Kensal Green Cemetery. That city of the dead hides in its underground mansions many mute lips that in life spoke eloquently, many right hands that at the bidding of the inspired brain wrote down words over which, though the hands are coffin-dust and the pens they wielded have long since rusted away, thousands of readers still laugh or weep. No laughter had ever a heartier ring, no tears came ever more truly from the heart, than the tears and laughter the world owes to Thomas Hood. He whose years, though few in number, were made long and evil by suffering, could sympathize, as the healthy in body never would, with the afflictions of others. He whose brave heart kept its cheerfulness even in presence of the lifted dart of Death was not a man to laugh as, in print and elsewhere, fools have so often laughed. The mirth of Hood was the mirth of a soul that looked on life as an April day, and enjoyed with infinite zest the sunshine that smiled forth between the showers.

It may seem mistaken to claim for this kindly and gentle spirit a place in our English Valhalla, a seat among the throned immortals who shall be crowned while time lasts with the glory of their works on earth. To Hood the majority of critics would assign little more than the cap and bells of the jester. He benefited humanity by no invention, say they, led no army, governed no empire, was neither philosopher nor statesman, neither the author of great events nor their historian. In the utilitarian balance such a life might be thought hardly worth the weighing. But the glory of Thomas Hood is of a lustre that eyes dazzled by the glitter of gold can never appreciate; his services to humanity were of the order whose praise is heard in eternity as well as on earth. He was the poet of the poor, above all of the poor who are women, and whose sins and sufferings go on from day to day in London, that living whirlpool over which forever hangs a thick pall of smoke, as if man were grown ashamed of the city he had fashioned and would fain shut out its streets from the eye of God. The poet of the poor, Hood was never the unreasoning hater of the rich. He did not call on the people to rise, as Samson rose among the Philistines, and shake to pieces the Government under which they lived. With a voice of infinite pathos he spoke to Englishmen who were wealthy and prosperous of the starving needlewoman laboring in her garret, Death sitting by her side and waiting for the stitch that should be the last; of the outcast girl looking into the waters of the Thames, while the very wind spoke to her in fiend-like whispers, and shadowy forms rose up blackly from the black depths and beckoned her to leap. It may reasonably be doubted whether Howard did so much for humanity as has been accomplished by the "Bridge of Sighs" and the "Song of the Shirt."

Death and fame came to Thomas Hood almost together. For twenty years he had held his place among the rank and file of literature, earning thereby little more than daily bread and the applause that is but of a moment, when, in 1843, the Christmas number of "Punch" electrified its readers with the "Song of the Shirt." Those wonderful verses went from newspaper to newspaper, as in old times the beacon fire was accustomed to pass from hill to hill. The laurels reaped by the author were, however, barren, and the sunshine of celebrity had nothing golden in its beams. With the new year was born an unlucky publication christened "Hood's Magazine." Misfortunes fell thick upon both periodical and editor, and the "flashes of merriment" that the latter still put forth came from a life blackened with the clouds of sickness and calamity. By May Hood was in a sick-room, and as editorial apology for the non-continuance of a novel he had commenced sent forth a drawing of "a plate of leeches, a blister, a cup of water-gruel, and three labelled vials." All the rest of that year, and far into the spring of the next, the light of life still flickered on, sometimes burning up brightly enough for the sick man to resume his pen, sometimes all but fading away into eternity. "I am so near death's door," said Hood on one occasion, "that I can almost fancy I hear the creaking of the hinges." The 3d of May, 1845, saw that door gently opened for him, and as quietly as a tired child falls asleep this gentle spirit passed away from earth. Angels are supposed to be the peculiar attendants of the dying, and a ministering spirit certainly watched over the death-bed of Thomas Hood. It was his wife, the good genius of his career, the faithful companion of his few joys and lessener of his many sorrows; she to whom, as Mr Hall tells us in his "Book of Memories," Hood once wrote, "I never was anything, dearest, till I knew you; and I have been a better, happier, and more prosperous man ever since. Lay by that truth in lavender, sweetest, and remind me of it when I fail." When the last sands in the hourglass of life were failing, this devoted wife and Death leaned together over the worn frame from which the soul had all but escaped; and as the light of another glory than that of earth dawned upon the dying poet, she heard him murmur, "O Lord, say, Arise, take up thy cross, and follow me!" A few months, and "liking not to live without him," she went down after him to the grave.

Not a mere jester was it that died with such words upon his lips, but a brave and kindly spirit, who did his noble duty in the battle of life, and who, however the weight of his own cross might press upon him, had constantly a heart to appreciate and a hand to relieve the sufferings of others. There is nothing in the fame of Hood over which any descendant of his can ever blush. He wrote much that was calculated to make the best of men better, not a line that could by any possibility make the most worthless specimen of humanity worse. Numerous and exquisite as are his poems, there are two that in especial shed a starlike light upon his memory. While London remains a city, the hearts of men must continue to be stirred by the "Song of the Shirt" and the "Bridge of Sighs." The one poem is in some sense the sequel of the other. In this vast metropolis, where the worship of the golden calf is practised on an ever-increasing scale, it is the poor, and not the idols, that so frequently endure the fate of being ground to powder. These victims are, in general, girls, — uneducated or half-educated drudges, whom the love of liberty and the hatred of domestic service have driven to toilsome and ill-paid modes of gaining their daily bread. Year by year their numbers increase, year by year thousands of miserable fates and faces tell us how swift is the descent from the death-in-life of the garret to the hell of the streets. Lest we should be over-zealous in casting stones, lest we should forget that forgiveness turned not away from the sins of Magdalen, Hood showed us the starving woman despairing, the sinful woman dead. "One more unfortunate" is, perhaps, the most pathetic line poet ever penned. The thought of it seems to turn the Thames into a grave.

CHARLES DICKENS.

[Born 1812. Died 1870.]

MANY readers of Mr. Forster's "Life of Charles Dickens" must have been forcibly struck with the biographer's observation that future generations will probably be more apt than our own to discover the close resemblance in genius between the great painter and moralist, Hogarth, and the author of "Oliver Twist." The observation is suggested by the brief but finely discriminative criticism on Hogarth's pictures which Mr. Forster has set down from his recollections of a conversation with Dickens, of the highest interest for the immortal novelist's admirers. Its truth cannot fail to be felt by any one who is familiar with Charles Dickens's writings. There is in the works of both the same tendency to make art subserve a

CHARLES DICKENS.

purpose of a higher kind than mere entertainment, or even the satisfaction of the natural craving of the cultivated mind for intellectual and moral beauty. More than that, each may be said to have originated this employment of the imaginative faculty in his own field. Hogarth was a story-teller in the strictest sense of the term; his series of pictures corresponded closely to the novelist's chapters; he had his introduction, his development, his sorrowful or happy *denouement*, as the case might be. And in all this, unlike the painters of his own time and perhaps of every other time, he sought, with a stern, unfaltering, and yet a tender hand, to inculcate moral truths and to exhibit to vice a terrible forewarning. Beyond even this, he knew how to touch the heart of the spectator with a peculiar pity, traceable, perhaps, to a sense of the common weakness of men and women to resist temptation, whether by reason of wretched training or natural feebleness of purpose, and to the awful nature of the inevitable consequences of folly and crime; so that, by means that on the surface sometimes seem to be hard, cruel, and cynical, he awakens sentiments of the truest philanthropy.

Whether art is concerned with any other object than of yielding delight by the idealized representation of nature, and whether a work of art is not sufficiently justified if it ministers to our sense of beauty, are questions that have been long debated, and never brought to any satisfactory conclusion. In regard to novels "with a purpose," as they are called, there have not been wanting critics to denounce the very principle on which they are based. It has been complained that the novelist's incidents are apt to be obviously strained for the purpose of enforcing his moral; and it has been said, moreover, that the novelist's pictures of life being of his own creation, as well as the consequences which he chooses to assign to given lines of conduct, whether of a good or an evil kind, they can "prove nothing," because they depend upon the arbitrary will of the inventor of a mere fable. All this, however, is clearly as applicable to Hogarth's "Marriage à la Mode" as to the stories of Dickens, in which wrongs and abuses are exposed in a powerful light, or the evils of selfish isolation are brought before the mind of the reader in vivid colors. After all, the question seems to resolve itself into the truthfulness of the work and the power of the artist to impress that truthfulness upon the mind. That there are feeble pictures and feeble novels "with a purpose" is clear enough; but that such works may be made to serve a didactic object, not only without any injury but with positive gain to their artistic qualities, is not less evident. Any way, the popular novelist who turns his attention in this direction wields beyond question an enormous power for good. Fiction is at once the most captivating and the most popular of all forms of literary art. The immediate circulation obtainable by a powerful novel is ordinarily far beyond anything that a mere moral treatise could hope to attain. And over and above that, the vast majority of readers are far more capable of receiving impressions in this way than in any other. The question, therefore, whether it would be justifiable to turn his great gifts to mere purposes of amusement was one likely to impress the active and benevolent mind of Dickens. That he did from a very early period of his career seek in this way to combat evil and to encourage good, — and above all to awaken that sympathy with the weak and helpless which is the first condition of resolute effort for their benefit, — is clear to all readers of his writings; nor should it ever be forgotten that as the writer of stories "with a purpose" in this sense, he was absolutely the creator of a new kind of fiction. In the abundant humor and genial pleasantry of Fielding, the coarse drollery of Smollett, the glowing imagination of Mrs. Radcliffe, or even in the delightful creations and the innocent fancy of Scott, we look in vain for any such distinguishing object. The author of "Oliver Twist," in brief, is the inventor of moral fiction in which the ethical teachings, like the lessons of Nature herself, are spontaneous and unobtrusive, yet profoundly convincing. This is a very different thing from the old moral story-book, in which virtue inevitably rose to civic honors, while vice always fell a victim to fire or shipwreck or devouring lions on the coast of Africa. Of the influence, whether direct or indirect, of Dickens's genius in this way we have since had abundant examples. It is observable in the powerful fictions of Mrs. Beecher Stowe, no less than in Victor Hugo's immortal story, "Les Misérables."

There is no more interesting task than that of tracing the history of Dickens's career down to the formation of his mind in this direction. He was reared, as we all know, in a family circle in which straitened circumstances were the rule. The humble suburban house with its melancholy little forecourt in Landport, adjoining Portsmouth, is still to be seen in the same condition, apparently, in which it was when occupied by the poet's father, an employé in the Navy Pay Office, in 1812, the year in which Dickens was born. He was from the first a sharp lad, and the shifts and necessities of his parents painfully impressed him from an early time, as the successive scenes of their daily life became fixed upon his memory. He had sad experiences of those most mournful of localities, the pawnbroker's shop and the inside of the prison in which his father was confined for debt. Wandering about the streets of London, and passing to and fro between his forlorn home and the blacking warehouse near Hungerford stairs, where he was "a poor little drudge," at an age when now even the children of the poorest of the poor are required by law to be at school, he became familiar with misery in many forms. When a gleam of sunshine came and he was sent to school, his studies were too brief and too desultory to be deserving of the name of education; and even these advantages ceased almost within the period of childhood. It was at the age of fifteen that he "started in life," as the phrase is, as an office-boy in an attorney's office, — a poor lookout for an ambitious lad, for the law had in those days closed the door of the legal profession against poor men's sons even more closely than in these times. Charles Dickens had so determined a will, so steady a power of application, and so remarkable a habit of throwing his whole heart and mind into any work that he undertook, that but for those artificial barriers it is most likely that the law would have become his profession. But it had been sternly enacted that no one should enter the legal portals without a preliminary articleship, the official record of which must bear a stamp of the value of £120. The articled clerk was also peremptorily forbidden to receive any remuneration throughout his five years of servitude, and even when free he was interdicted from practising until he had paid a yearly certificate duty of £12. In the attorney's office, therefore, no prospect offered itself, and the bar was still more inaccessible. Nothing daunted, the lad turned his thoughts to the profession of journalism, which at least was open to the cleverest and most deserving. How resolutely he went to work to acquire the facility in shorthand writing necessary for the post of parliamentary reporter most readers know.

The story of this period of Charles Dickens's life is one of the most encouraging to young men dependent on their own exertions that biography offers. Genius is, and ever must be, a rare and exceptional gift; but the means whereby this lad rose to a position in which his great powers were able to exert themselves are certainly within the reach of average talent and opportunities. The sketches which under the pseudonym of Boz were contributed by the young reporter to the columns of an evening paper, and afterwards republished, attracted some attention. They display his powers of observation, but they are in a considerable degree imitative. The influence of Theodore Hook and of Hood is strongly observable in them, and, what is more important, they exhibit little of that serious purpose which, even amidst their abundant humor, is so conspicuous in his later works. To satirize the habits of the cockney of those days — the spruce city clerk on his holiday, etc., the humble shopman and his sweetheart at the suburban tea-gardens, the servant girls and apprentice boys at Greenwich Fair — were the common objects of the writers of sketches in the magazines of the time; and "Boz" simply fell in with the fashion of the hour. In the sketches of London street life there is indeed indication of that marvellous observation and sympathy with the habits and pursuits of the poor of London which afterwards attained so remarkable a development. It is more curious still to observe the influences of a literary fashion in the origin and history of his first great work, "Pickwick."

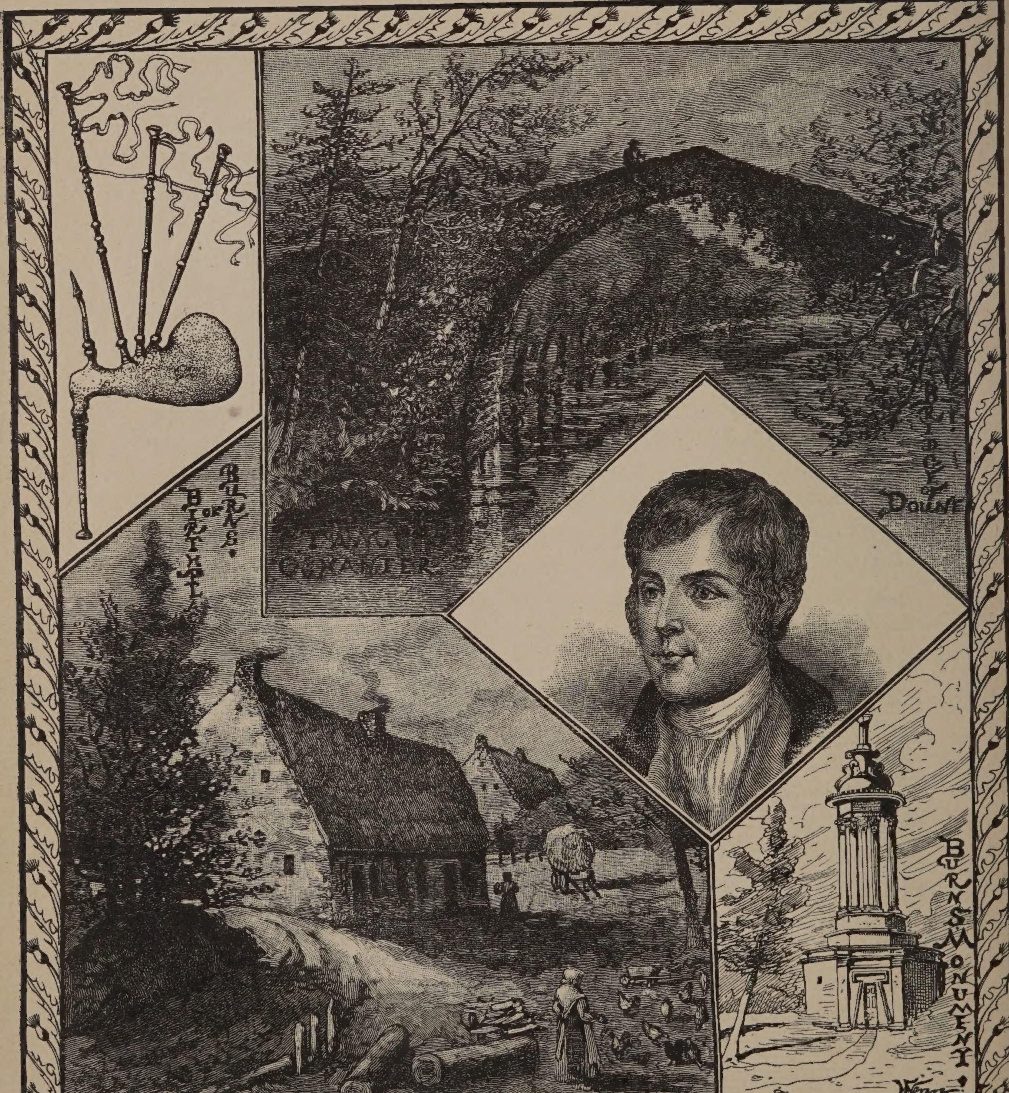
In the satire upon the conduct of breach of promise actions in the famous trial scene, in the pictures of the inside of the old disorderly debtors' prison, and in the pathetic element of some of the little stories introduced into the work, we have a gleam, as it were, of the distinguishing qualities of his future novels. The cheerful companionship and overflowing good-nature of the scenes at the hospitable Kentish farmhouse, moreover, could never have been depicted by a misanthropic hand. But, after all, "Pickwick" cannot be said to have had any more serious purpose than that of producing innocent merriment. The book, indeed, was the direct product of a merely conventional sort of humor then greatly in favor with the public. Its inspiring principle was simply that habit of making fun of cockneys, and above all of cockney sportsmen, which was so conspicuous in the productions of the artistic and literary caricaturists of the days of King William.

In order to understand the true origin of "Pickwick," — the first work that made its author famous, — it is worth while to trace the history of this odd fashion. It was in the year 1831 that the old laws which aimed at confining field sports exclusively to the most wealthy and aristocratic class were first relaxed. Before that time the conditions of carrying a gun in pursuit of game were almost prohibitive, and even the buying and selling of game were strictly forbidden. The new law certainly did not make sporting a poor man's pastime; but the sight of even a middle-class sportsman had hitherto been so rare that the new order of things seems to have struck the minds of contemporary humorists as something exceptionally anomalous and absurd. Hence for long after that time our wits, both great and small, were never tired of making fun of the supposed blunders and mishaps of the typical citizen — generally assumed, by way of heightening the jest, to be a "soap-boiler's clerk" — who was of a mind to go forth in quest of game. The localities of the cockney sportsman's achievements were represented as rarely going farther afield than Hornsey Wood or the meadows which then existed about Copenhagen House, Islington, now a populous neighborhood of houses and shops. It was considered real humor to depict him as firing at ducks and hens in a dairyman's yard, or shooting gypsy babies in a hedge in mistake for hares. When he was shown as flying from the approach of an infuriated bull, and plumping, in his distress, into the very middle of a gardener's cucumber frame, or seeking refuge on the top of a wall thickly garnished with tenter-hooks, while a stout farmer was rapidly approaching flourishing a cart-whip, the humor was no less certain to be applauded. If a companion inquired diffidently, "Which do you put in first, the shots or the powder?" he was represented as answering, "Why, you mix them, to be sure." Even when he was seen, as in one of Seymour's most approved sketches, scattering his brains over a stubble field by the accidental bursting of a gun, there was still no pity for the imaginary cockney sportsman. When a collection of these once popular objects of the print-shop windows were republished a few years ago, it was found that their power to amuse had almost entirely evaporated. In truth, it never had much foundation beyond the novelty held in the idea of any person connected with towns and trade shouldering a gun on the 1st of September, and the supposed wild incongruity of the associations suggested, though traces of this bygone fashion are observable in the early sketches of John Leech and also in the earlier volumes of "Punch."

Publishers are not slow to conform to the prevailing fancies of readers, and hence it occurred to Messrs. Chapman and Hall to avail themselves of the services of the popular Seymour, who engaged to furnish them with four sketches monthly; that upon this they looked about for a writer to furnish the necessary supply of letterpress, and naturally thought of the author of the "Sketches by Boz," who had exhibited sympathy with the fashion of the day, are facts that have often been told; but it is not generally so clearly perceived that in its origin at least Seymour was regarded as the predominant collaborator. An absurd controversy raged some years ago regarding the relative shares in "Pickwick" of the original artist and the author. It was then established, no doubt, that the benevolent bald head and those most respectable limbs encased in black shorts were the happy inspiration of the unfortunate artist; but Seymour, as is well known, died before the appearance of the second monthly number, and the truth is that even before then the whole character of the project was becoming changed under the influence of Dickens's genius. The first number appeared on the 31st of March, 1836. It was announced as the "Posthumous Papers of the Pickwick Club, containing a faithful record of the perambulations, perils, adventures, and sporting transactions of the Corresponding Members." Each number was to comprise four illustrations by Seymour, and twenty-four pages of letterpress. The advertisements also stated, in the mild form of fun then in vogue, "that the travels of the members extended over the whole of Middlesex, a part of Surrey, a portion of Essex, and several square miles of Kent," and it was promised that the narrative would show "how in a rapid steamer they smoothly navigated the placid Thames, and in an open boat fearlessly crossed the turbid Medway." "Phiz" was engaged to take the place of Seymour; the proportions were changed to two illustrations instead of four, and thirty-two pages of letterpress instead of twenty-four. The club was also rapidly dropped, and the adventures of Mr. Pickwick soon acquired the new form in which it was destined to become so widely known.

It is a surprising evidence of the fertility of invention and self-confidence of the young author that it was at that time that he undertook the editorship of "Bentley's Miscellany," in which his "Oliver Twist" — the most powerful, perhaps, certainly the most terrible in its stern moral lessons, and the most pathetic in its pictures of human failing and human suffering, of all his stories — first made its appearance. "Pickwick" and "Oliver Twist," in fact, were written together month by month, nor does the author appear at any time to have been much in advance of the printer's demand for manuscript. "Pickwick's" monthly "green leaves" never failed to make their appearance for the twenty months of its career; the "Parish Boy's Progress," however, was certainly once interrupted, for in the month of June, 1837, an apology appeared in the magazine for the omission of the usual instalment, on the ground of the sudden death of a dear young relative to whom he was passionately attached. The inspiring principle of "Oliver Twist" was a noble one; it was that of compassion for the poor under the hardships inflicted upon them by the new Poor Law Act just then coming into operation. Dickens, it must be admitted, was quick to judge, being quick to feel. He probably knew but little of the evils of the old poor-law administration, which had grown until they had finally necessitated the application of some sharp remedy. Great changes of that kind, however wholesome in principle and beneficial in their ultimate objects, were not to be effected without inflicting some injustice; but it seems certain that the changes in progress were accomplished in too many instances by wanton harshness. The papers were filled with complaints of "the Bastiles," as the union workhouses were called, and Dickens's heart was touched and his imagination fired by this theme. Happily the profound truthfulness of his creations saved him from doing injustice to any class. If there was exaggeration in his views, his pictures of life are still sound.

From that time a purpose other than mere entertainment rarely failed to be discernible in his works. In that wonderful panorama of life and most affecting narrative, the "Old Curiosity Shop," we find in "Kit" the first of those portraits of poor neglected street boys, for whom he was able to enlist so strong a sympathy; and what can move compassion towards the poor more deeply than his scenes of life in the manufacturing towns and districts whither the child wanders with the old man? In "Barnaby Rudge" how fine a lesson is administered on the folly and sin of religious hatreds! Special evils are attacked, as all readers know, in many other of his novels; but the general purpose of mitigating that harshness which arises from ignorance of what is good and deserving of sympathy in others, is predominant in all his works. It was this fact, apart from his singularly impressive voice and highly studied yet thoroughly natural delivery, which gave to his readings so fascinating a character, and rendered them so popular both in England and America.



ROBERT BURNS.

The life of Charles Dickens is too large a theme to be treated here save under one such aspect as we have taken. It is to be read in Mr. Forster's interesting and elaborate but still insufficient biography, and in the collection of his correspondence under the editorship of his eldest daughter. It is further to be read in his works themselves. Nearly fourteen years have now elapsed since his death. The terrible railway accident at Staplehurst to the tidal train, in which he happened to be a passenger, had given to his system a great shock. Railway travelling from henceforward seems to have affected his nerves in a curious degree. The sad scenes of lingering suffering and death which he witnessed, too, on that occasion, had impressed his mind with a horror which he often recalled with painful feelings. It is a singular coincidence that his strikingly sudden death took place on the anniversary of that disastrous accident, just five years later, — that is, on the 9th of June, 1870. Since then his vast reputation has assuredly undergone no diminution. Cheaper editions of his works have brought them within the range of countless readers everywhere. Certainly no other author ever enjoyed in his lifetime so great and so long-sustained a popularity; but there is every reason to believe that the fame of Charles Dickens is destined to grow brighter yet.

ROBERT BURNS.

[Born 1759. Died 1796.]

"LET me write the songs of a people, and I care not who make the laws," is an observation shrewdly applicable to the genius of Robert Burns. Where indeed, upon the broad roll of names eminent in song, is there to be found a national poet whose memory is so tenderly cherished by his countrymen as is that of the humble Scottish bard? Where is there another whose simple lays are so often on the lips or so highly treasured as his? Wherever you find a Scot his eye lights up at the mere mention of the name of Burns. A century has rather increased than diminished the warm love and admiration in which the poet is held by the great mass of his countrymen, who celebrated the centennial anniversary of Burns's birth with enthusiasm all over the civilized world. But it is not alone to Scotland that the fame of Robert Burns belongs. "Tam o' Shanter" and the "Cotter's Saturday Night" are domesticated in the literature of all English-speaking peoples, there to constantly renew their youth when the pretty trifles that to-day make reputations shall have outlived their brief hour of popular favor.

Burns was born in the parish of Alloway, near Ayr, on the 25th of January, 1759. His father was a poor farmer who gave his son what education he could afford. Robert was taught English well, and " by the time he was eleven or twelve years of age, he was a critic in verbs, substantives, and particles." He was also taught to write, had a fortnight's French, and had obtained a little practical knowledge of land-surveying. He had a few books, among which were the Spectator, Pope's works, Allan Ramsay, and a collection of English songs. His reading was subsequently extended to Thomson, Sterne, Shenstone, Mackenzie, and other standard authors. This was the whole foundation upon which the young poet was to build a reputation that should outlast the groundwork. As the advantages of a liberal education were not within his reach, it is scarcely to be regretted that his reading was at first so limited in its range. His mind was not distracted by a multitude of volumes. What books he had, he read and studied thoroughly, and his mind grew up with original and robust vigor. It is impossible to contemplate the life of Burns at this time without a strong feeling of affectionate admiration and respect. " His manly integrity of character (which, as a peasant, he guarded with jealous dignity) and his warm and true heart elevate him, in our conceptions, almost as much as the native force and beauty of his poetry." We see him when a mere youth toiling " like a galley-slave " to support his parents, yet grasping at every chance of acquiring knowledge from men and books. Burning with a desire to do something for Old Scotland's sake, whose very soil he worshipped, venerating the memory of her ancient patrons and defenders, filled with an exquisite sensibility and kindness that could make him weep over even the destruction of a daisy of the field or a mouse's nest, — these are all moral contrasts and blendings that seem to belong to the spirit of romantic poetry. His writings, as we know, were but the fragments of a great mind, the hasty outpourings of a full heart and intellect. When fame had at last lifted him to the insecure and dangerous place of a popular idol, — soon to be thrust down again into poverty and neglect, — some errors and some frailties cast a shade over the noble figure; but with the clearing away of prejudice, envy, and uncharitableness, time has graciously restored to Burns the love and gratitude of his countrymen; for, great as were his temptations or his frailties, the world has recognized that the inward instincts of the man were large, generous, and noble. Let us draw the veil over these frailties. He indeed suffered an earthly martyrdom, but he has been awarded a posthumous triumph.

After the publication, in 1773, of Fergusson's collected poems, there was an interval of about thirteen years during which no writer of eminence had arisen who attempted to excel in the native language of the country. In the summer of 1783 Robert Burns, the "Shakspeare of Scotland," issued his first volume from the obscure press of Kilmarnock. Its influence was immediately felt, and that influence has not yet ceased to vibrate in the hearts of the Scottish race. Burns was then only in his twenty-seventh year. No poetry was ever more instantaneously or universally popular among a people than that of Burns in Scotland. There was the humor of Smollett, the pathos of Sterne, the real life of Fielding, and the pictorial power of Thomson, — all united in an Ayrshire ploughman. So eagerly was the book sought after, that, when copies of it could not be obtained, many of the poems were transcribed and sent around in manuscript among admiring circles of readers. The subsequent productions of the poet did not materially affect the estimate of his powers formed from his first volume. His life was at once too idle and too busy, and it was also too brief, for the full development of his extraordinary powers. It cannot be said that Burns fails absolutely in any kind of composition, except in his epigrams. These are often coarse without being entertaining. Nature had been abundantly lavish to him, but she had denied him wit. Burns had little or no technical knowledge of music. His whole soul, however, was full of the finest harmony. Not a bird sang in a bush, but it was music in his ear. He fell in love with every handsome female face he saw, and when thus moved his feelings took the form of song, and the words fell as naturally into their places as if prompted by the most perfect mastery of musical rhythm. A lengthy theme wearied and chilled his Muse; but a song embodying some burst of passion, patriotism, love, or humor, was exactly suited to the impulsive character of Burns's genius and to his situation and circumstances. The Scottish poet knew, however, many old airs and more old ballads; and a few bars of the music or a line of the words served as a keynote to his suggestive fancy.

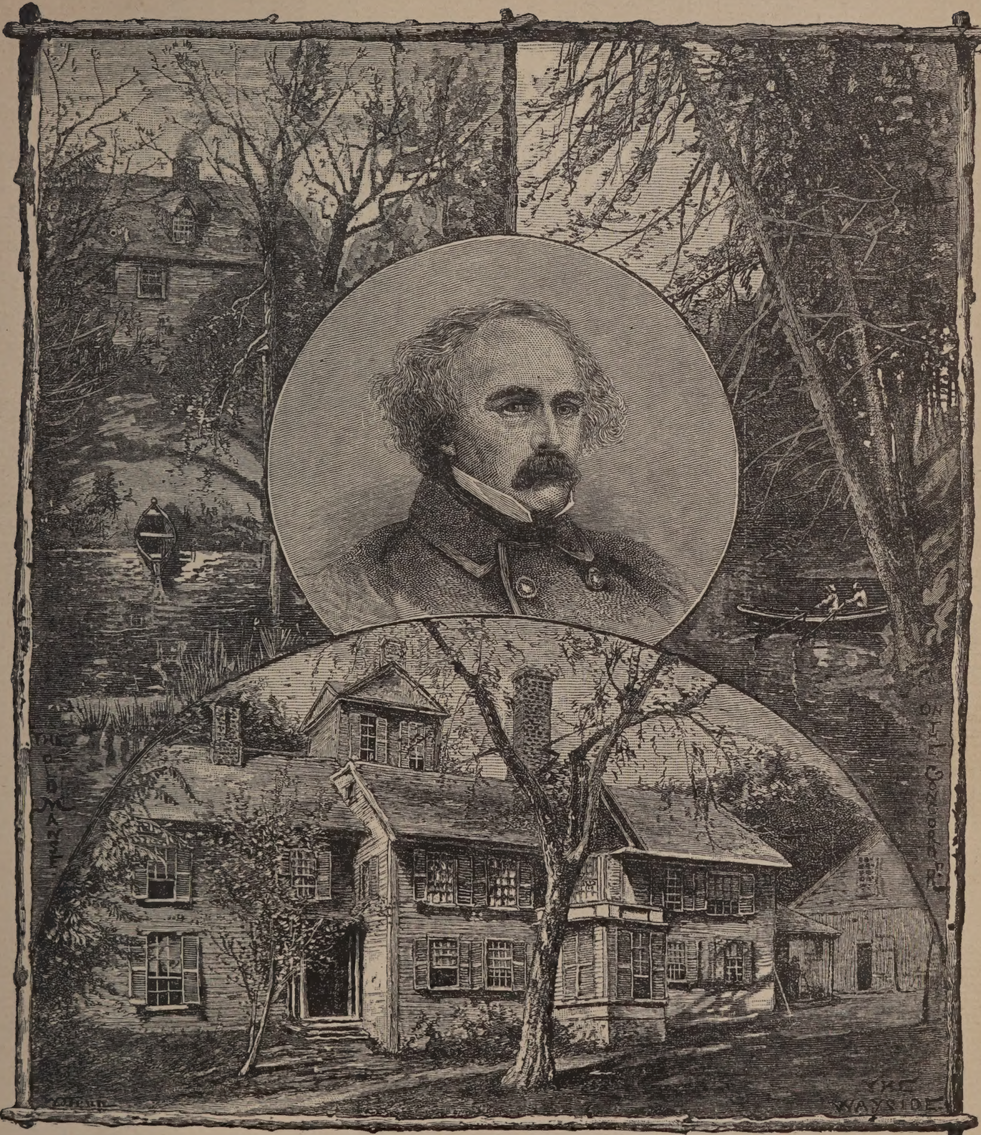
Burns's incentive to composition was his ardent admiration for the fair sex, and it was to one of his boyish loves that his earliest poetical effusion was dedicated. This strain of admiration, which in him became an element of weakness, appears throughout all his later writings. His favorites were in the humble walks of life, but he elevated them to Lauras and Ophelias. Having failed in attempting the business of a flax-dresser and in farming, Burns brought out his little volume of collected poems in order to procure the means of emigrating to Jamaica. It carried him instead into the best circles of Edinburgh, in whose adulation the poet soon lost his head. The brilliancy with which Burns had flashed upon the society of Edinburgh, soon suffered a partial eclipse; but the attentions that he had received were in their consequences most disastrous to the poet's future. He contracted habits of convivial indulgence which in the end proved fatal to his prospects of advancement, while they steadily undermined his constitution. Burns tore himself away from the pleasures and gayety of Edinburgh to begin again the life of a farmer. Having some £500 in ready money remaining from the sale of his poems, he took Ellisland Farm, near Dumfries, and settled down into a more tranquil existence. At this time too he was legally married to Mrs. Burns, whose connection with the poet had hitherto formed one of the darker episodes of his career. His old habits returning upon him, finding that farm labor and its demands were a stumbling-block in the way of his literary ambition, Burns applied for and obtained the place of an exciseman for the district in which he lived. Abandoning his farm to the care of servants, Burns might now be seen mounted on horseback, pursuing defaulters of the revenue among the hills and vales of Nithsdale. The farm was soon given up, and Burns removed to Dumfries. There was no amendment, and, to make matters worse, Burns soon fell into disgrace with the Excise Board on account of his political opinions. The time, it will be remembered, was one of great excitement; for the French Revolution was then menacing the peace of Europe and turning the heads of the imaginative and enthusiastic spirits who had imbibed socialistic ideas from the false philosophy of the leaders of popular opinion in France. Burns was too independent and much too outspoken for a placeman. Some of his imprudent expressions were reported to his superiors; and though he retained his office, all hope of a promotion through which he might attain the longed-for life of literary leisure was now wrecked.

From this time the poet's wayward fortunes rapidly declined. He became irritable and gloomy. His health gave way. In the summer of 1796 he was attacked with fever, which on the 21st of July terminated fatally, the poet then being in his thirty-eighth year.

NATHANIEL HAWTHORNE.

[Born 1804. Died 1864.]

THE career of this great novelist conclusively shows us how even a genius of the first rank, such as his unquestionably was, may long fail of obtaining the recognition that is its due. There is, in fact, no royal road to literary fame. Yet it must be clear to every discriminating and impartial student of Nathaniel Hawthorne's career, we think, that his discouragements and his trials arose in most cases from causes inherent in the man himself. Indeed the deductions essential to a just view of Hawthorne's life and work are easily made while we follow the successive steps by which his position at the head of American writers of fiction was reached at last. There is probably no writer whose personality seems to us so largely mingled with his productions as Hawthorne's. In truth, the man and his work are inseparable in our minds. Sometimes he seems merely repeating to us the things he has seen in his visions, for he was ever as one who dreams dreams and sees visions; then again his intellectual and moral insight is so like one laying bare, under great stress of circumstances, the inmost secrets of his own heart, that we cannot forbear investing him with the intelligence, and something too of the dread, which we are apt to associate with clairvoyants. From this we conclude that few writers have had such power of self-absorption in their own creations as Hawthorne had, and that it is for this reason his strong individuality is so indelibly stamped upon his characters. Hawthorne's novels contain a few scraps of autobiography; his Note-Books add something to our knowledge of him; but as his character was full of strange inconsistencies, of which he, most of all, seemed sensible, so was he averse to having his biography written, although in one of his dreamy monologues,



NATHANIEL HAWTHORNE.

when he seems thinking aloud, he conjectures that such distinction would yet be his. Materials for Hawthorne's biography are therefore not only scanty, but fragmentary. Intimate personal knowledge of the man could not be claimed by the most attached or the most trusted of his friends. It is therefore to his works that we must turn, with the secret feeling that they alone delineate Hawthorne truly. As every writer has his literary models, so there can be little doubt that Walter Scott and Charles Lamb were the models upon which Hawthorne's literary style was formed. These were the men who had most impressed his age. He soon entered a field in which his own brilliant imagination was supreme, and in which he is still without a peer.

Nathaniel Hawthorne was born at Salem, Massachusetts, July 4, 1804. The family surname was originally Hathorne, which was altered by the novelist himself while he was a college undergraduate. His ancestors belonged to the stern old Puritan stock, and one of them had been a conspicuous figure in the witchcraft horror. The house in which the novelist was born is still standing. He tells us that "thousands upon thousands of visions have appeared to him in it," and that, should he ever have a biographer, he ought to make great mention of this house in his memoirs, for it was here that he kept the long and weary vigil that preceded the dawning of his fame. It is a humble dwelling in a quiet, old-fashioned neighborhood, one of scores that still make Salem a connecting link with the past. The street is narrow, and runs down to the water-side and to the wharves, and so was a convenient abode for the novelist's father, Captain Nathaniel Hawthorne, who was a shipmaster in the day when Salem was a port of importance. House and wharves alike indicate the decay of this importance. When young Hawthorne was four years old his father died in a foreign port, and the lad's care and training thenceforth fell to his mother, who after her bereavement went home to her father's house. Young Nathaniel became a sort of protégé of his uncle, Robert Manning, who took charge of the boy's education. The Mannings were owners of some property in Raymond, Maine; and when

Nathaniel was fourteen, Mrs. Hawthorne took her children and went to Raymond to live. The Hawthornes remained there only about a year, and then returned to Salem. Hawthorne refers with unaffected pleasure to the wild and free life that he led while roaming through the woods or skating by moonlight on Sebago Lake. But he also regretfully says that it was there he got "his cursed habit of solitude" which clung to him through life. One may perhaps see in this habit of seclusion that the boy was "father to the man."

At seventeen Hawthorne entered Bowdoin College. He was a member of the now celebrated class of 1825. Two benches behind him sat young Longfellow. In a higher class was Franklin Pierce, with whom Hawthorne formed a friendship that lasted through life, and that proved of much advantage to him, for Pierce, too, was a rising man, and he eventually became Hawthorne's patron; and it was Pierce, again, who stood by Hawthorne's solitary death-bed and who closed his eyes as the last act of earthly friendship.

We now see the boy changing into the man. Yet to his classmates he was a riddle. He seemed to have an existence apart from them, at most times, into which he could not and did not admit them. One of them says: "I love Hawthorne, I admire him; but I do not know him. He lives in a mysterious world of thought and imagination which he never permits me to enter." Another says that Hawthorne never told a story or sung a song while he was in college. This reserve procured for him the name of "the silent man" among his classmates, who seem, nevertheless, to have put the most generous interpretation upon this unsocial disposition, thus paying a high tribute to Hawthorne's superiority. So the sensitive, serious, and shrinking student dwelt in a world apart from his fellows. His books and his own thoughts were his chosen companions, and among them his happiest hours were passed.

Notwithstanding the high opinion of his abilities that his classmates had formed, Hawthorne's scholarship did not show great excellence or give high promise for the future. He did not make his mark, as the saying is, at college. Longfellow, and not Hawthorne, was the conspicuous figure in his class; for the latter possessed far too much of that "truant disposition," which we see developing more and more as the years roll on, for steady application to study. In these words, which were doubtless penned with a smile on the lip at the memories they recalled, Hawthorne reminds his friend Horatio Bridge of the time when they were lads together at this country college, "gathering blueberries in study hours, under those tall academic pines; or watching the great logs, as they tumbled along the current of the Androscoggin; or shooting pigeons and gray squirrels in the woods; or bat-fowling in the summer twilight; or catching trout in that shadowy little stream which, I suppose, is still wandering riverward through the forest; — two idle lads, in short (as we need not fear to acknowledge now), doing a hundred things that the faculty never heard of or else it had been the worse for us."

After graduating Hawthorne returned to Salem, and for some time led what seemed to be an almost purposeless existence. Yet it is evident that his aspirations already pointed toward a literary career. For him, he says, the learned professions had few charms; and so far as we can judge it seems clear that his mind was steadily settling the problem of his future vocation in the direction of literary achievement. He began writing anonymously for the periodicals of the day those tales many of which he has told us were, in a fit of despondency or despair, "burned to ashes." The "Gentle Boy" and "Sights from a Steeple," were first printed in the "Token," an annual that was conducted by Goodrich, the genial "Peter Parley," who so delighted the young readers of a generation ago. Among its contributors the "Token" numbered such well-known writers as John Quincy Adams, Willis, Everett, Pierpont, Neal, Sedgwick, Sigourney, and Tuckerman; while Longfellow and Holmes were new candidates for popular favor. Among the unknown contributors was Nathaniel Hawthorne.

Besides these fugitive sketches of his, which had been chiefly drawn from the traditions or associations of his birthplace, Hawthorne published anonymously, in 1832, a romance entitled "Fanshawe." But he never acknowledged it, and this literary foundling has only recently been rescued from the limbo to which its author's better judgment had consigned it. Hawthorne had been writing some ten or twelve years without making, as he frankly avows, the slightest impression upon the public. Still he wrote on. His young manhood had been spent in the pursuit of a phantom which had constantly eluded his grasp, — literary celebrity. If we may believe him, he had burned much more than he had published. He was as inexorable as the Indian who puts his deformed offspring to death. Yet, in spite of all that a soul so sensitive as his must have endured while waiting for recognition, Hawthorne clung to his purpose with the tenacity of one who feels that he has great things within him, impelling him onward at the sacrifice of everything else. Others, it is true, have possessed this persistency without Hawthorne's genius; but this author's estimate of himself was not a mistaken one. So far the pleasure that he had derived from literary composition was his greatest reward; but that pleasure alone, he declares with grim irony, will not "keep the chill out of a writer's heart, or the numbness out of his fingers." Finally, Hawthorne gathered together into a volume the various waifs that he had sent forth, and offered them to Goodrich for publication. It is said to be true that Goodrich declined to print the volume without a guaranty against loss; and that it might never have appeared at all but for the generous help of Horatio Bridge, to whom, in the beautiful dedication to "The Snow Image," the author acknowledges his debt of gratitude in a way that does credit to both head and heart. In 1837 the volume was brought out, under the title of "Twice-Told Tales." Longfellow was one of the first to commend it as the work of genius. So little was Hawthorne known that when his name was thus publicly announced most people supposed it to be fictitious, and not the author's real one. "Twice-Told Tales" was accorded a favorable, but rather languid reception. "A moderate edition was 'got rid of' (to use the publisher's very significant phrase) within a reasonable time, but apparently without rendering the author or his productions much more widely known than before. The heart of the great public had not yet been touched.

The next year Hawthorne received the appointment of Weigher and Gauger in the Boston Custom House. In this unromantic capacity he continued in the public service until a change of administration turned him out of office. That this change brought no hardship along with it, is pretty clear from a perusal of one of Hawthorne's letters in which he unbosoms himself to this effect. "I pray," he says, "that in one year more I may find some way of escaping from this unblest Custom House; for it is a very grievous thraldom. I do detest all offices, — all at least that are held on a political tenure. And I want nothing to do with politicians. Their hearts wither away, and die out of their bodies. Their consciences are turned to india-rubber, or to some substance as black as that, and which will stretch as much."

From this most irksome and prosaic life Hawthorne now eagerly turned to the ideal. Always a dreamer, always an ardent lover of nature, haunted by the idea of a perfect Christian brotherhood that should be lifted high above the debasing influences of the great world, and in which men should act according to the dictates of a pure reason, our author joined the community of Transcendentalists at Brook Farm. This Brook Farm episode was only the echo of that imagined by Coleridge, Southey, and a few others like them, of establishing on the banks of the Ohio a community founded on a thoroughly social basis. The actors, in spite of merciless ridicule, showed the courage of their convictions; but the daily drudgery that made part of the system by which these dreamers expected to revolutionize society proved too much for one like Hawthorne, in whom intellect was supreme; and so he came back into the world again, a wiser if not a better man. Man in his primitive estate was not, after all, what he had imagined. Instead of being stimulated, his intellectual faculties were stunted by toil. With the feeling fresh upon him that he had escaped from a wholly unsuitable and unnatural life, Hawthorne sets down this emphatic opinion: "The real Me," he says, "was never an associate of the Community." The future novelist was now, after this experience, building more air-castles from the materials of his fancy; and this time, at least, they were destined not to fall in ruins about him.

Very likely another and even more potent influence was contributing to draw Hawthorne back into the world again; for within a year he was married to Miss Sophia Peabody, of Salem, whom he had long known and admired. The young couple chose a home at Concord, in the old parsonage house that Emerson had formerly inhabited, but which was soon to become more famous as the "Old Manse." An exquisite picture of this house and its surroundings forms the introduction to the "Mosses of an Old Manse." The doubly famous landmark stands within musket-shot of the first battle-field of the Revolutionary War, and from its windows the startled occupants had witnessed the brief but fateful combat begun for the possession of the bridge that here spanned the historic stream. This fact did not, however, greatly impress Hawthorne, who frankly owns to being little moved through the force of such associations as these.

The "Old Manse" had fixed, however, Hawthorne's position in the literary world. From this period the biographer has only to recount his successes. After a three years' residence at Concord — to his limited circle of friends as great an enigma as ever — Hawthorne had the good fortune to receive from a Democratic administration the appointment of Surveyor for the Port of Salem, and, bidding farewell to the Old Manse and to his habitual seclusion, he was presently installed within the edifice which, like everything else with which Hawthorne's genius or his personality is associated, was thenceforth destined to live forever. From the Salem Custom House emanated that wondrous story of sin, remorse, and shame, "The Scarlet Letter." Hawthorne has told us that he found the missive from which the motive of his novel is taken in an obscure corner of the Surveyor's office. The sketch of "Endicott and the Red Cross" contains the germ of this story, which afterward became in the author's hands the work generally conceded to be his greatest.

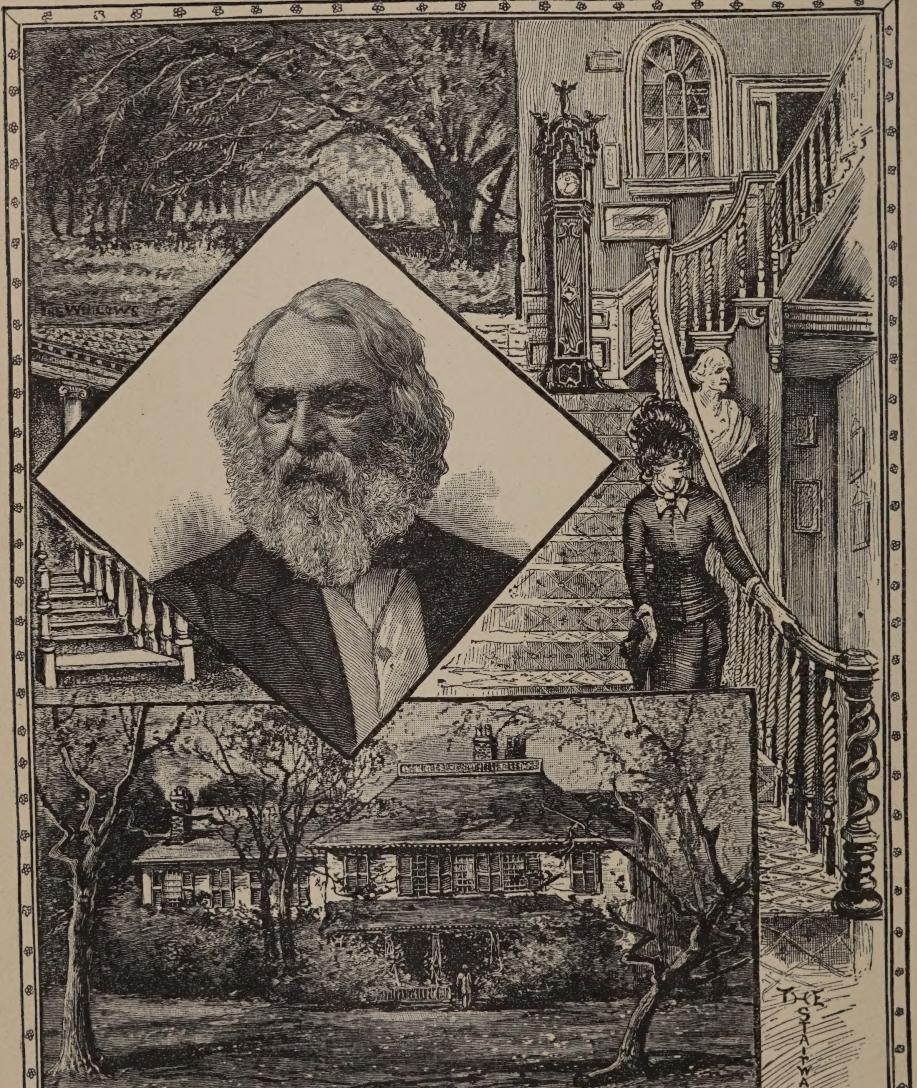
A rare faculty of individualizing places had already become one of Hawthorne's marked characteristics. A true artist, his pictures are always so finished that whether it be an old house or some other inanimate object that he is describing we feel that we have seen it with all the power of Hawthorne's imagination. Then his houses are all haunted, which strongly contributes to make us consider them to have human attributes and human functions.

In 1850, the year in which "The Scarlet Letter" was published, the turn of the political wheel again dropped the Surveyor from office. He soon quitted Salem; for, strangely enough, after his arrival at manhood he had never any liking for the place that was so intimately associated with his early struggles. This time he took up his residence at Lenox, in Berkshire. Here he wrote "The House of the Seven Gables," a romance founded upon the idea of a family that is predestined to misfortune through the wicked deeds of a wicked ancestor. It is therefore of the same gloomy cast as "The Scarlet Letter;" but the same subtile power of analysis, of acute description, of vigorous beauty of style, speedily rendered this work a rival to that upon which Hawthorne's renown chiefly rests. After this Hawthorne went back to Concord, and settled down in the house since known as the "Wayside."

The next event in Hawthorne's life — for between whiles he had produced the "Wonder Book," "Tanglewood Tales," "The Blithedale Romance," and the "Life of Franklin Pierce" — was the appointment by his old friend, now President Pierce, to the American Consulate at Liverpool. This gave Hawthorne the coveted opportunity of seeing the Old World; for it is known that he had long felt that the field in which he had achieved his successes was too narrow for him. In 1857 he resigned his consulate, and for the next two or three years travelled on the Continent, making a considerable sojourn in Italy. From this experience came "The Marble Faun," Hawthorne's third great work in which the idea of secret guilt is the dominant one. "The Italian sky, under which the story was conceived, seems to have imparted to it a degree of softness and beauty wanting in its predecessors." Yet in spite of what Hawthorne felt, and has expressed, in regard to the difficulty of writing romances about his own country, some of the most discriminating of critics have declared that they like him best on American ground. Looking to him as being peculiarly the product of American thought and training, and as the coming exponent of a "national literature," they could not agree with the dictum that "romance and poetry, ivy, lichens, and wall flowers, need ruins to make them grow."

Hawthorne returned to his native country crowned with honors, but not so strong physically as when he had left it. In the retirement of his home at Concord he settled down into the old life and its quiet ways; but at fifty-six the literary tasks that he had set for himself were no longer so easy of accomplishment as such labors had once seemed to the younger and more ambitious man. His melancholy seemed to increase. His country was now convulsed by civil war. His health continued steadily declining, so much so that by the winter of 1864 his condition was causing much anxiety to his family and friends. In the hope of improvement Hawthorne set out with his constant friend Pierce on a journey to the White Mountains in the month of May. On the 18th the two college boys, now two gray-haired men, reached the town of Plymouth. Hawthorne retired early to rest. At four in the morning Pierce arose, went to his friend's bedside, laid his hand upon him gently, and found that life was extinct. The body was brought to Concord. Longfellow, Emerson, Holmes, Lowell, and many other literary friends stood around the bier when the coffin was lowered into its final resting-place in Sleepy Hollow Cemetery. Upon the coffin was laid Hawthorne's unfinished romance, of which Longfellow has so beautifully said, —

> "Ah, who shall lift that wand of magic power,
>   And the lost clew regain?
> The unfinished window in Aladdin's tower
>   Unfinished must remain."



HENRY W. LONGFELLOW.

HENRY W. LONGFELLOW.

[Born 1807. Died 1882.]

IT may well be doubted if any one of the poets who have arisen during the last half-century has so closely touched the great popular heart as Longfellow has.

Many years ago Cardinal Wiseman used this language when speaking of Longfellow: "Our hemisphere," said he, "cannot claim the honor of having brought him forth; but he still belongs to us, for his works have become as household words wherever the English language is spoken. And whether we are charmed by his imagery, or soothed by his melodious versification, or elevated by the moral teachings of his pure muse, or follow with sympathetic hearts the wanderings of Evangeline, I am sure that all who hear my voice will join with me in the tribute I desire to pay to the genius of Longfellow."

If the true grandeur of a country lies in its illustrious men, then has no one who is identified with letters done more to exalt the American name at home and abroad than this eminent and gifted poet; nor does it seem at all likely that the severest tests of time will lessen the love and admiration with which his writings have inspired the present generation of readers.

Longfellow is the poet whom all the world understands. He is no mystic, no seer. His calm philosophy always teaches some worthy or enduring lesson. Even the rude Village Blacksmith becomes under his hand an exemplar of human effort. His themes are as simple as his language is the perfection of melody and grace. If the right word is always a power, then may this poet's exquisite gift of language well stand for what is highest in the art of communicating one's ideas to others. His

"Psalm of Life," his "Excelsior," simple homilies that they are, appeal to every one, however humble, who may have had or is capable of feeling an aspiration toward what is highest and noblest, but who needs the guiding hand to lead him on. Like Abou Ben Adhem, Longfellow may well claim to be written down as one who loves his fellowmen. And even if our blood is not always greatly stirred by reading Longfellow's poetry, it graciously admits us into a sanctuary consecrated to the purest and holiest emotions, where the strifes and tumults of the world pass unheeded by. To what worthier purpose could the poet's art be directed? He does not, indeed, seek to carry our hearts by storm, nor to arouse our passions, but rather to conquer through the grace of an abounding love for, and faith in his fellow-man.

As a story-teller in verse, Longfellow has had no equal in his own time; while few among the great poets of the past are his peers in the power of interesting or of entertaining an intelligent audience. Witness his "Tales of a Wayside Inn," as an example of this rare gift. We do not know whether the sonorous energy of rhythm in "Paul Revere's Ride" or the playful fancy of "The Courtship of Miles Standish" charm us most. In the first we can almost feel the sting of the spur, as Revere urges his excited steed on over the rough highway, while the rhythm itself keeps time to the quick beat of hoofs, as the eager horseman, with a wild shout on his lips, rides at headlong speed through village and farm, bearing his fatal message of war; and notwithstanding our later knowledge, the fear grows upon us, as we read, that the intrepid rider will be too late. Such ballads, too, as "The Wreck of the Hesperus," leave us with the feeling that we have been made actual lookers-on while the doomed vessel, with the frozen helmsman lashed to the tiller, and the maiden praying on the wave-swept deck, was being borne steadily on to her destruction. We doubt if the realism of this terrible picture has ever been excelled.

We might go on from poem to poem, as we would in some magnificent garden, plucking here a flower born of the poet's exuberant fancy, enjoying the beauties his finer instinct has pointed out, or tasting the rich fruitage that his wand of magic power has created. And they are the choicest fruits of the vineyard. Let us say, frankly, that in Longfellow's poetry we think every one will find something that meets a want or fulfils a longing of his nature. Guide, comforter, philosopher, friend, are all combined in the personality of Longfellow; for it is he who speaks to us, not as the Pharisee spoke, but with the voice of abounding love, wisdom, and all charity.

William Longfellow, the first English emigrant of the name, settled at Newbury, Massachusetts. He was a soldier in the disastrous expedition that Sir William Phips led against Quebec, and perished by drowning. The Longfellows had subsequently removed into the District of Maine, where Stephen Longfellow, the poet's father, was born. After graduating at Harvard, Stephen Longfellow began the practice of law at Portland; and it was in this town, on the 27th of February, 1807, that Henry Wadsworth Longfellow came into the world. The future poet had both Pilgrim and Puritan blood in his veins. His father was a man of sound and scholarly attainments, whose position and means were such as to command for his son a favorable entrance into whatsoever career he might choose to adopt.

At fourteen, young Longfellow entered Bowdoin, taking his place in the same class with Hawthorne. The boy Longfellow was then "very handsome, always well dressed, with no taste for any but refined pleasure." His slight but erect figure, his fair complexion, his clear blue eye, and abundant light brown hair gave him a certain distinction among his fellows, who respected him for the purity of his tastes and his morals, and loved him for the gentle affability of his manners. Longfellow was, however, a conscientious student; and he speedily demonstrated to his classmates as well as to his instructors that there was no effeminacy of mind behind these rare personal traits. He left college distinguished for his scholarship.

It was during his college life that Longfellow began to write poetry, — first for the newspapers of his native place and afterward for the "United States Literary Gazette." From the first his verses attracted attention. A few of these pieces were subsequently reprinted in a group of "Earlier Poems," but the larger number remained unacknowledged by the author and uncollected until after his death. Longfellow was not yet eighteen when he was feeling his way to public favor by writing such poetry as "An April Day," "Woods in Winter," and the "Hymn of the Moravian Nuns." Bryant was then the foremost American poet; and Longfellow has admitted that the author of "Thanatopsis," was the master who had inspired and guided his own youthful muse.

From Bowdoin Longfellow went into his father's office to begin the study of law; but the college overseers had kept him in mind, and within a few months he was offered and accepted the appointment of professor of modern languages at his *alma mater*, with the privilege of spending three years abroad before entering upon his duties. These years were passed in travel, observation, and study, whose course may be traced in "Outre Mer," a volume of prose first published in 1835. This was not, however, Longfellow's first appearance as an author; for he had in 1833 published a translation from the Spanish of "Coplas de Manrique." The original author, Don Jorge de Manrique, was a sort of Castilian Sir Philip Sidney, and like him was devoted to both arms and letters. But before these publications had appeared, an event of importance to Longfellow's life had occurred. Upon his return from Europe he had assumed his duties at Bowdoin. In 1831, at the age of twenty-four, he married Miss Mary S. Potter, of Portland, and in 1833 his translation of the "Coplas" was printed.

We will suspend the continuity of our story only long enough to refer to a remarkable scene which took place at Bowdoin in 1875, because it joins two eras in the poet's life. It was the fiftieth anniversary of Longfellow's graduation. The survivors of the class of 1825 had come together to celebrate the event and to renew old associations. Only thirteen members of this class were then living. Hawthorne was dead. These survivors, now grown old, assembled in the church as they had done in the old college days; and when the venerable poet stood up and began to read his poem "Morituri Salutamus," the scene was indescribably affecting. Never before had those classic walls witnessed the like solemnity. Just before leaving for their respective homes the class met in a retired room of the college, and prayed together. Then, under the branches of the old tree, which was endeared to them by its many associations with their youthful sports, each took the other in silence by the hand, spoke a last farewell, and went his way.

In 1835 the professorship of modern languages at Harvard, made vacant by the death of Professor Ticknor, was tendered to, and accepted by Longfellow. He now made a second visit to Europe, and it was while there that his wife's death occurred. The "Footsteps of Angels" consecrates her memory in a spirit of beautiful resignation.

Returning to Cambridge and to his duties at Harvard, Longfellow soon established himself in the house that had formerly been the headquarters of Washington and was thenceforth to be his own home. Here much of his later poetry was written. In Washington's bedchamber Longfellow wrote "Hyperion" and "Voices of the Night." "Hyperion" contained many fine translations from the German poets, whose works were then almost unknown in America. The "Voices of the Night" was equally a revelation of the rise of a new poet among us.

These two works surely established Longfellow's fame. Thenceforth his course was upward and onward. Space fails us to do more than enumerate the titles of some of his later contributions to literature. His "Ballads and other Poems" appeared in 1841; "Evangeline," in 1847; "The Song of Hiawatha," in 1855; "Courtship of Miles Standish," 1858; "Tales of a Wayside Inn," 1863; "Flower de Luce," 1867; "New England Tragedies," 1868; "Three Books of Song," 1872; Aftermath," 1874; "The Masque of Pandora," 1875; "Poems of Places," 1876–79; "Keramos," 1878; "Ultima Thule," 1880; "Michael Angelo," a posthumous work, 1883.

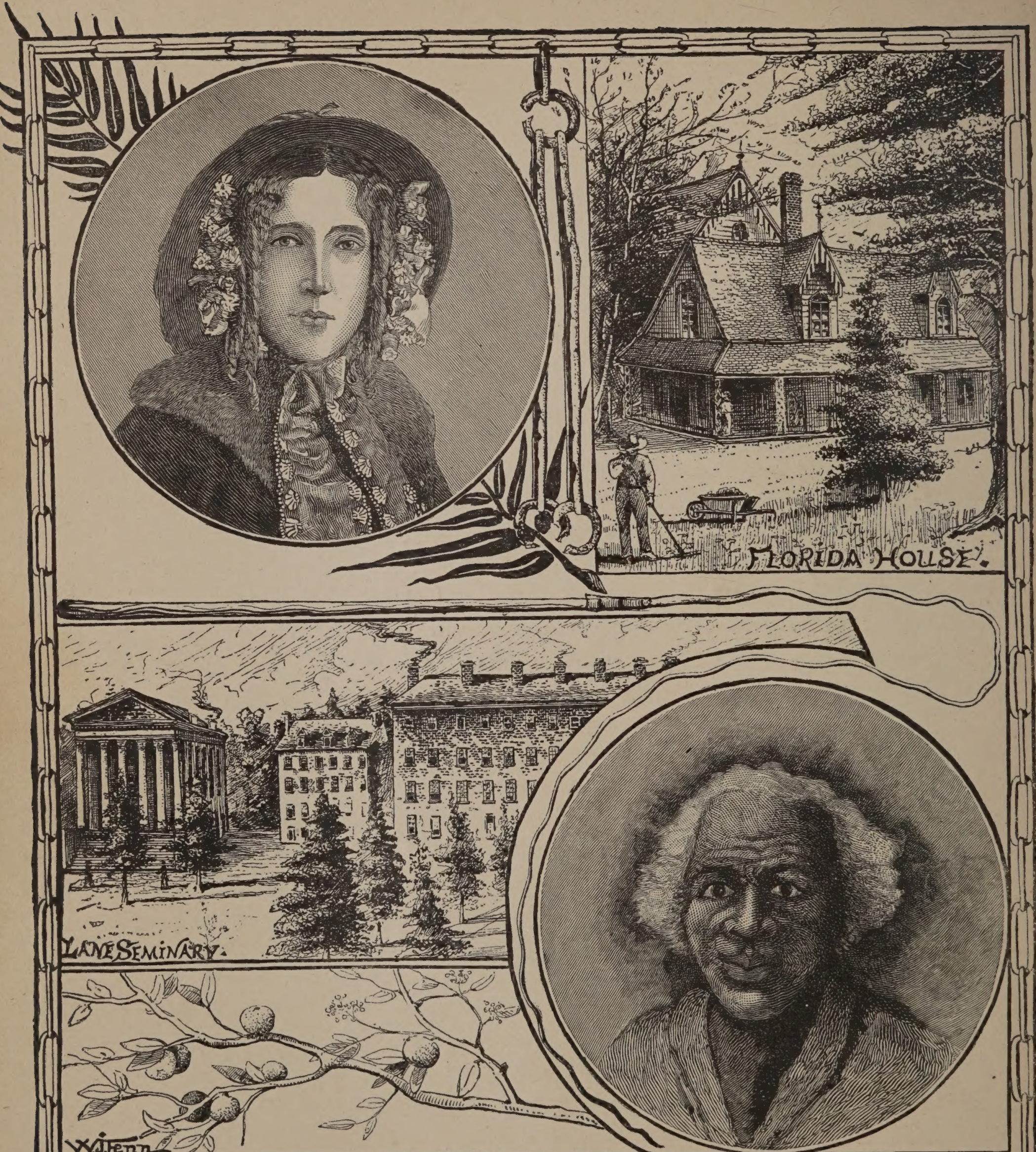
Although in "Hiawatha" Longfellow had fully met the demand for an American poem, that he aimed at something broader than an American reputation is as clear as day. With him universality was a canon of literary art. So lately as 1853 an English journal of reputation could say, "They [the Americans] have not yet produced a great poet; but they have produced men, like Mr. Longfellow and others, who promise, at no distant day, to reach the highest summit of poetic art." The promise was so far fulfilled that it is doubtful if any one of Longfellow's contemporaries is so widely read or so highly esteemed as he is. His poems have been translated into every cultivated tongue; and that universality which he instinctively felt to be the only measure of true greatness has welcomed him to the great brotherhood of cultivated nations as a benefactor of mankind. Art is indeed the interpreter of all languages.

In 1843 Longfellow was again married, his second wife being Miss Frances Elizabeth Appleton, of Boston, whose tragic death (she was accidentally burned to death in her husband's library) left such a deep and lasting impression upon the poet's mind that for many years he was never known to refer to it. This happened in 1861. Two sons and three daughters were born of this marriage, — all of them in the historic Cambridge mansion. In March, 1882, shortly after the completion of his seventy-fifth year, and after only a week's illness, whose fatal ending was not at first anticipated, the poet died in the fulness of his fame, lamented as few of the great ones of earth have been, but leaving behind so vital a part of himself that we can scarcely say that he is dead.

Longfellow was a man of noble and gracious presence, free from the littleness or *hauteur* that so often degrades great men, a friend to every call of humanity, a foe to every wrong, a guide and benefactor to all who sought his counsel or assistance, a patron of true worth, and a most devoted lover of the arts. No literary man of his century has left so sweet a remembrance behind him, or, what is far more, so high an example of his own simple precept that

> "We can make our lives sublime."

Longfellow had a grave and gentle humor that was most winning. He was a delightful companion and a charming host. His manner was the union of courtliness and of *bonhomie*, —


FLORIDA HOUSE.
LANE SEMINARY.
W.J.Fenn

HARRIET BEECHER STOWE.

the blending of a Sidney with an Agassiz. Calumny never approached, nor could flattery spoil, him. Though his hand will nevermore touch the pen, we say again that Longfellow is not dead, for his genius still abides with us.[1]

HARRIET BEECHER STOWE.

[BORN 1812.]

AT the mature age of forty Mrs. Stowe took up her pen to write what proved to be the greatest book of the century, with probably little or no idea of the extraordinary effect that it was destined to produce, — that her work was, in fact, the weapon by which slavery in the United States should receive its deathblow. This is not saying a word too much for the influence that effort of genius, "Uncle Tom's Cabin," exerted upon the public mind; for what statesmen, politicians, political economists, with all the agitators of the antislavery school, had so far failed to bring about, — namely, the creation of an overwhelming popular sentiment against slavery, — Mrs. Stowe did almost with a stroke of the pen. By such humble means are the destinies of nations decided! In the non-slaveholding communities "Uncle Tom" created a feeling of national degradation, certain to recoil upon its cause, which feeling was greatly intensified by the almost unanimous voice of the outside world raised in condemnation of this sarcasm upon the name of free institutions. This voice of the people has often been compared with the voice of God. The revulsion against slavery was instantaneous. And so "Uncle Tom" became, without any special purpose in its author, a great moral force. Emancipation was indeed a long time deferred; yet it is undoubtedly true that by bringing slavery to the bar of an aroused public opinion, and thus constituting it the one absorbing question, political and moral, of the hour, its ultimate downfall was rendered a matter of certainty.

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[1] The portrait of Mr. Longfellow is from a picture selected by the poet himself, and pronounced by him to be the most satisfactory likeness he had ever sat for.

"Uncle Tom" was a book that everybody could understand. The poor and down-trodden wept over it; the rich and powerful were haunted and reproached and humbled by it; while the slaveholders, seeing the whole civilized world arrayed against them through the agency of one weak and obscure woman, realized that at last slavery and the public conscience stood face to face. The event could not long be uncertain.

Mrs. Stowe has, it is true, written much besides, but nothing that can compare with "Uncle Tom." That book began a new era. Her "mission" in the world — and the phrase has its true significance here — was achieved at a single stroke through the simple and truthful tale which flowed from her pen under the impulse of a noble passion that could not be restrained. Slavery was the fatal bequest of the founders of the Republic; it was surrounded with safeguards; it had created a privileged class, in whose hands it had always been an element of power in the nation; and it was growing more and more arrogant and aggressive. In vain did a few philanthropic men try to make head against it. Slavery stood intrenched behind the Constitution of the nation, and defied them. Nay more, scorn, abusive epithets, and violence were liberally meted out to this weak band of agitators, even in the free section of the Union. Garrison, Whittier, Phillips, Tappan, Birney, and their intrepid colaborers were barely tolerated at home. In the slave States no one dared to raise a voice against the iniquitous domestic institution. But "Uncle Tom's" myriad voices could not be silenced. An English writer of eminence has spoken of it as one of those books which insist upon being read when once begun. And read it was, both North and South. Slaveholders read it secretly. Resistance to the encroachments of slavery upon free territory began at this era. That resistance produced open war between the sections; war brought about emancipation; and in a little more than ten years after the appearance of "Uncle Tom" no slave was lawfully held in bondage within the vast territorial limits of the American Union. We can now look back and see how it was that Mrs. Stowe did more to bring about this result than all other agencies put together.

"Uncle Tom's Cabin, or Life among the Lowly," was published in 1852. Its success from a literary standpoint was prodigious; and as that success is the key to its moral influence, we will give a few facts in relation to it. In a few weeks' time fifty thousand copies had been sold; in a few months two hundred thousand had been struck off, and the demand was still for more. Within two years, it is said, two million copies had been spread throughout America and Europe, where it was quickly translated and scattered broadcast over the continent. Editions in nine different languages have been printed. It was dramatized and acted on the stage from one end of the Northern States to the other, and in every capital in Europe, thus greatly enlarging the sphere of its influence by bringing the realism of its pictures of Southern life and manners home to multitudes of spectators. And notwithstanding the fact that slavery with all its accompanying evils has now been for twenty years dead and buried, the story continues to be read and acted, and has enduring interest, both as an incident of the greatest social convulsion of modern times and as portraying an extinct social phase with originality and power. In any case, we conclude that the history of the great civil conflict in the United States can hardly be read understandingly without a reference to "Uncle Tom" and its gifted author.

In 1853, the year after the appearance of "Uncle Tom" in this country, Mrs. Stowe went to Europe, arriving in England in May. She was accompanied by her husband and by her brother, the Rev. Charles Beecher. "Uncle Tom" had already preceded her, and all classes were eager to see and do honor to its creator. She was welcomed at Stafford House by a most distinguished gathering, numbering many of the highest personages in the kingdom. Everywhere her reception was of the most flattering kind. In Edinburgh she was tendered a public banquet, at which the Lord Provost presided. The ceremonies were concluded with the presentation to Mrs. Stowe by ladies of Edinburgh of £1,000, in gold, the product of an "Uncle Tom Penny Offering," to be applied by Mrs. Stowe to the cause of emancipation. The ladies of Aberdeen presented her with £120 for the same purpose. Yet while the talented author was being thus fêted and caressed, and while the press was saying the most flattering things of her, England was being flooded with cheap "Uncle Tom's," for which Mrs. Stowe never received a penny.

The antecedents of such a woman are naturally interesting. Mrs. Stowe's mind was formed in a good school. Lyman Beecher, her father, was the son of a New England blacksmith, and had followed his father's trade until convictions of duty had carried him into the pulpit, where he became a commanding figure. Strong and sturdy common-sense were his prominent characteristics. It was while he was pastor of the church at Litchfield, Connecticut, and rising in fame as a pulpit orator, that Harriet was born. From Litchfield Lyman Beecher was called to the pastoral charge of the Hanover Street Presbyterian Church, in Boston, where he remained until 1832. In that year he removed to Cincinnati, Ohio, in order to assume the charge of Lane Theological Seminary, an institution founded by the New School Presbyterians for the purpose of preparing young men for the ministry of that denomination. Mr. Beecher remained at the head of the Seminary for eighteen years, until 1850, when in consequence of the decline of the institution he returned to Boston. As these eighteen years formed the important period of Harriet Beecher's life, the history of Lane Seminary is to some extent that of the work which subsequently won for her an enduring literary fame. The year 1833 inaugurated a bitter agitation of the slavery question; and that agitation, begun by the Abolition Convention which met at Philadelphia, reached and disturbed the Seminary on the banks of the Ohio. This institution was soon in a blaze of excitement. It became a centre of active abolition feeling and effort. The merchants of Cincinnati, whose business relations with Kentucky were close and intimate, took the alarm. The mob, urged on by slaveholders or by those who sympathized with them, threatened to pull down the Seminary. Public opinion demanded that its voice should be silenced, and it was silenced. The students then deserted it almost to a man, leaving the Faculty to do what it could towards restoring to the institution its lost prestige. The Beechers were silenced with the rest.

One member of the Faculty was the Rev. Calvin E. Stowe, Professor of Biblical Literature in the Seminary. Harriet Beecher married him in 1832, the same year that she went to Cincinnati. When this important event in her life took place, she was not quite twenty-one. She had previously taught a female school, with her sister Catherine, in Hartford, and the two sisters had opened a similar one at Walnut Hills; so that, although still young at the period of the disorders at the Seminary, Mrs. Stowe was already an experienced observer of human nature, with the added advantage of having always lived in an intellectual atmosphere in which her mind steadily expanded and matured.

For eighteen years, then, Lane Seminary was Mrs. Stowe's home. We have seen that the effort to convert that institution into neutral ground had brought nothing but disaster to it or its friends. But such close contact with the horrors of slavery — and of all these none was more harrowing than the pursuit of many miserable fugitives into the free territory of Ohio — was every day increasing the antislavery feeling. Cincinnati soon became a battle-field of the two factions, who grew more and more exasperated and determined in their hostility towards each other as the conflict progressed. One protected the poor fugitives and aided them in their flight. The other retaliated by mobbing known abolitionists, destroying abolition presses, or by murderous assaults upon the free negroes of the city, who were shot down in the streets, and their quarters plundered and sacked, as if they had been the most dangerous enemies to public order.

To all of these scenes Mrs. Stowe was an eyewitness. The road which passed her door was the one commonly spoken of as the "Underground Railroad;" for it was the route over which fugitive slaves made their escape from Kentucky to Canada.

To more than one of these trembling outcasts her husband gave food, shelter, and a God-speed on his forlorn way to freedom; and to the sad chapter of actual experience thus gained by Mrs. Stowe, under conditions which burned its incidents and its lessons deeply into her memory, the world owes the production, a dozen years later, of "Uncle Tom." She had shed many tears over the unwritten wrongs of the slave, but she lived to see a world weeping over her touching story of these wrongs; and, what is more, she has lived to see them redressed.

"Uncle Tom" was not written, however, under the uncontrollable impulse of the moment. Mrs. Stowe herself alludes to the period of observation during her residence at Lane Seminary in these words: "For many years of her life the author avoided all reading upon or allusion to the subject of slavery, considering it too painful to be inquired into, and one which advancing light and civilization would live down." We know, therefore, that she did not believe herself to be appointed in any special way an advocate of the antislavery cause; but we have at the same time no difficulty in perceiving the strong tendency of her mind in that direction from the moment the opportunity to speak out presented itself. Until then her woman's heart bore the scar of an unhealed wound. That opportunity came at last. Upon his return to New England Professor Stowe had accepted the appointment of Divinity Professor at Bowdoin, and with his gifted wife had taken up his residence at Brunswick. It was there, while occupied with the cares of a family, that Mrs. Stowe received from Dr. Bailey, of the "National Era," a request for the great story, which first appeared in the weekly issues of that paper. Having once been a victim of mob violence in Cincinnati himself, no man could better appreciate the truth of "Uncle Tom" than Dr. Bailey. He knew and esteemed the Beechers. He had read with approval Mrs. Stowe's first volume of tales, "The Mayflower," which she brought out in 1849. Upon this request, which was accompanied with a check for $100, Mrs. Stowe began to write during such intervals as could be snatched from household duties. Her ambition had been aroused in its true

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direction. She wrote on with increasing force and intensity. We are told how absorbed and fascinated she became with her theme, and with what fidelity she reproduced the scenes that had filled her womanly soul with horror and indignation. But as yet "Uncle Tom" had made little impression upon the public. The "National Era" was a partisan newspaper of limited influence, — so limited, indeed, that comparatively few persons are now aware that Mrs. Stowe's great novel first saw the light in its columns.

Mrs. Stowe's subsequent literary labors have been eminently productive, so much so that no woman of her century has contributed more to good literature than she. But our purpose is limited to the presentation of the one work upon which rests her claim to the name, not alone of a benefactor to her race, but of humanity everywhere; and with that we must remain content.

WILLIAM CAXTON.

[BORN 1412.[1] DIED 1492.]

THERE are some men who have lived and worked among us in such a manner as to merit the name of "Benefactors," whose legacy to posterity has been too great to be estimated, too pervading almost to be even felt. Like the immeasurably beneficial forces of nature, like the glorious sunlight, the life-sustaining heat, and water, the source and the emblem of purity, we are too much accustomed to them to be capable of appreciating them. Such is printing, the art by which these thoughts are at this very moment being conveyed, respected reader, to your mind.

Four hundred and forty years ago, or thereabouts, — for exact figures are not attainable, — a German, who is now conventionally recognized as John Gutenberg, discovered the art of mechanically reproducing on paper, by the use of movable types, words and pages that had previously been only engraved on blocks of wood, as books are produced in China at this day. Printing was known to the ancients and was practised by them. Paper was common enough a century or two before. For years mankind had been blundering on the verge of the great discovery of typography. Cheap books of different kinds were on sale in every country of Europe, before types were thought of. But this man, by his invention of a simple mould for casting characters, provided the world with facilities for its intellectual advancement, useful for all time, and capable of infinite utilization. All who have visited Strasburg have seen his statue, a fac-simile of which is appropriately placed in front of the government printing-office at Paris. At the base of it stands the grand inscription, *Et la lumière fut*, — "And there was light." That light beamed, intellectually, from the printing-press as when heaven's own light burst out, materially, at the command of the Almighty.

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[1] The exact date is not known.

We need not recount the incidents of the life of the great proto-printer, — his troubles at starting, the injustice his impecuniosity brought down upon him, his death imbittered by neglect, rendered the more satirical by the fact that he was the wearer of a courtier's dress. His art spread like wild-fire all over Europe. No modern inventor, even with the facilities of publication which we possess, and which were then wanting, has ever made such initial progress. Steam, railways, gas-lighting, and now the electric light, have passed through a long childhood; printing attained its majority in a day. From France, Spain, Portugal, Italy, and even Russia, it spread with a velocity reminding one of the transmission of news in Macaulay's Ode on the Armada.

It took, however, nearly thirty years to reach England. Printing was invented about 1440; it was introduced into England not before 1476 or 1477. In 1450 the whole Bible in the Vulgate Latin was printed; a copy of it (worth about £4,000) may be seen in the British Museum. Yet for so many years did England, destined to occupy so pre-eminent a place in the intellectual traffic of the world, remain without the "art preservative of arts."

The man who brought the British nation this gift was not a professional printer, not a craftsman. William Caxton — for that is our benefactor's name — never, in fact, became a good printer; early English books are not to be compared for elegance and taste to the contemporary productions of Continental countries. But he enjoyed the grand position of being the *first* printer in England, and brought over with him a blessing only comparable to that which was given to us by the first apostle of Christianity.

The mind would like to dwell on the lineaments of such a man. Unhappily we have no pictorial presentment of his form and features; the reputed portrait is absolutely fictitious. So much historical interest, however, attaches to the conventional likeness of Caxton that our artist has reproduced it, as well as some of the most noteworthy scenes of his labors. Nor do we know much about his life. He is not mentioned in any public document of his day; his name appears in certain deeds and books of account, but not in connection with the achievement that has immortalized him. All our knowledge of him is obtained from a peculiar gossiping habit he had of interlarding his writings with biographical reminiscences and personal sentiments. A few of these must now be referred to; but in this sketch we avoid mere historical or statistical details, with a view to appreciate the man's mission rather than to investigate his life.

He was born — we do not know when — in the Weald of Kent. Of the locality even we are ignorant. It was then a rude, almost barbarous country. The language was so broad as to be hardly recognizable as English. In fact, a century and a half after the nativity of our benefactor, a topographical writer described it as "a desert and waste wilderness," "stored and stuffed with herds of deer and droves of hogs only." Caxton's father was probably a landed proprietor; else he could neither have given him such a good education as he undoubtedly possessed, or apprenticed him to a London mercer, which proved the foundation of his fortunes.

After being at school, Caxton was sent to London, and apprenticed to Robert Large, member of the Mercers' Company. The latter was, as documentary evidence proves, a man of great influence and wealth. He was a merchant as well as a mercer; and it is nearly certain that among his merchandise were books. They were, however, rare, and consequently costly; hence the mercer's apprentice was placed in favorable circumstances to cultivate a taste for reading, which otherwise could not have been gratified without an expense obviously beyond his reach. Robert Large was Lord Mayor of London in 1439–40; in the following year he died, leaving to Caxton twenty marks, — a very considerable sum in those days. We now begin to get glimpses of the career of the future printer from stray records, and find that shortly after the decease of his master he went abroad. In 1464 Edward IV. issued a commission to Caxton and another to be his ambassadors and procurators to the Duke of Burgundy, in order to arrange a new treaty of commerce. This was effected: trade with England, which had been suspended for many years, was resumed. Caxton appears to have remained abroad on the scene of his diplomatic success at Bruges. He employed his spare time in literary pursuits, and produced a book which would not, however, commend itself to the taste of the present day. It is called "The Recuyell of the Histories of Troy," and was begun in 1468. It treated of chivalry, and its contents were a curious agglomeration of romance and fact, philosophy and facetiæ, with a thread of pious aspiration running through the whole. The translation was handed about in manuscript, and was highly appreciated. We are now again on conjectural ground, and know not certainly how it came to be printed or by whom. Certain it was that the "Histories of Troy" was the first published book in the English language. It is not yet settled from whom Caxton learned the art or where. There are two eminent authorities on the subject, — Mr. Blades, of London, and Mr. Madden, of Versailles. The first believes that he learned it from Colard Mansion at Cologne; the other, from Ulric Zell, of Bruges. A vast amount of controversy has ensued on this particular point. Caxton published several other books abroad, whose titles we need not specify. Suffice it to say, that after remaining out of his native land for about thirty years, he came back to London with a practical knowledge of the art of printing.

In 1477 there was issued a book called "The Dictes and Sayinges of Philosophres" — "Emprynted by one William Caxton, at Westminster." It was the first book printed in England. Caxton's press was set up in the precincts of the sacred building, and there he labored up to the time of his death. His publications are very numerous, his enterprise was indefatigable, and probably his financial success was not inconsiderable.

We cannot here give a bibliographical list of "Caxtons," those precious volumes now worth sums averaging £400 and £500 each. But we must refer to one indicative in its tone of the prevailing sentiment of its author. It was written, as we know, from the words of an apprentice who survived his master, — Wynken de Worde, — when the old printer was just on the verge of the grave. The title is, "The Art and Craft to know well to Die," and in the commencement are the following words: —

"When it is so, that what man maketh or doeth it is made to come to some end, and if the thing be good and well made it must needs come to good end; then by better and greater reason every man ought to intend in such wise to live in this world, in keeping the commandments of God, that he may come to a good end. And then out of this world, full of wretchedness and tribulations, he may go to heaven unto God and his saints, unto joy perdurable." A very little later, in 1492, Caxton had come to his own end.

Such is a very rough outline sketch of the life of a real "benefactor," not of an age, but for all time. He was not a great scholar, like some of his contemporaries; he seems to have eschewed politics and played no part in the eventful drama of his time; it is probable he did not die in affluent circumstances. But his life presents a variety of lessons and suggests many thoughts. His filial affection, his earnestness, his industry, his enthusiasm, and his rectitude are not unworthy of imitation in an age like our own, apt to undervalue such virtues. His piety was tinged with mediæval superstition, yet was unaffected and sincere. He never overrated his work, although he must have foreseen its tremendous importance and significance. England may well be proud of such a man; and although she has no monument of him in brass or stone, his memorial is universal. As was said of the great German proto-printer, his monument is "the frailest, but the most enduring,—it is THE BOOK."

SIR CHRISTOPHER WREN.

[BORN 1632. DIED 1723.]

CHRISTOPHER WREN was born at East Knoyle, in Wiltshire, the rectory of his father, Dr. Christopher Wren, Dean of Windsor, on the 20th of October, 1632. His uncle, Dr. Matthew Wren, who was successively Bishop of Hereford, Norwich, and Ely, was eminent in the ecclesiastical history of England. He was impeached, shortly after Archbishop Laud, for his devotion to the royal cause, but was never brought to trial, though he suffered a protracted imprisonment of nearly twenty years. Cromwell, who often met the young Christopher at his son-in-law Claypole's, sent a message by the youth to the Bishop that "he might come out of the Tower if he pleased." But the Bishop utterly refused, disdaining the terms proposed for his enlargement.

Wren was one of those whose future eminence was early foreseen, and whose riper years redeemed the promise of his youth. Like all great men he manifested large general powers, a versatility not arising from a smattering of a vast variety of knowledge, but from the grasp of those common principles that

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underlie all knowledge, and which give the fortunate possessor not only the mastery over any special field of study, but a facility of comprehension over the entire domain of knowledge. It is recorded that at the age of thirteen he had invented an astronomical instrument, an account of which he dedicated to his father in a Latin epistle. This essay was followed by others of the same kind. He was in infancy and youth extremely delicate in health. Wren received his early education under his father, and at the age of fourteen was sent to Wadham College, Oxford, where his attainments procured him the friendship and patronage of the most eminent persons, among whom were Bishop Wilkins and the celebrated Oughtred, who in the preface to his "Clavis Mathematica" mentions Wren as having attained at the age of sixteen such a knowledge in mathematics and in natural philosophy as gave promise of future eminence. Wilkins introduced him to Prince Charles, Elector Palatine, as a prodigy.

As early as 1645 he was one of a club of scientific men connected with Gresham College, who met weekly to discuss philosophical questions, — of that club from which sprung the Royal Society. More fortunate than his father and uncle, though he also lived in troublous times, he pursued his course straight to the object of his ambition while conflicting parties were exhausting themselves in acts of violence. It was not until Wren's time that the inductive process became duly understood and appreciated. It was the example of a few eminent men, of whom Wren was one, that first led the way to the adoption of the new philosophy, of reasoning gradually from particulars to those one step more general, and not, as formerly, adopting general positions hastily assumed from particular instances. But we must not tarry to dwell on his numerous contributions to science, — microscopical, astronomical, mathematical, physiological, mechanical, etc. The invention of the barometer was even claimed for him. He (in conjunction with Wallis, Huyghens, Newton, Leibnitz, and the Bernouillis) occupied himself with the investigation of the cycloid, which had been discovered by Pascal. He was also eminent as a demonstrator and anatomist, and originated the experiment of injecting various fluids into the veins of living animals. But to enter upon a detailed account of all the studies and discoveries of Wren would in fact be to give the history of natural philosophy in his age.

And now we reach the history of his crowning work, the grand Protestant monumental edifice, St. Paul's. This cathedral is the triumphant record of the culmination of the Reformation in England, — of religious views as diametrically opposed to those which preceded them as the architecture of the present building to that which it supplanted. This fact must be imperatively borne in mind in the contemplated internal decoration of the cathedral. For St. Paul's is the typical monumental edifice of what may be termed England's Protestant history. From every point of vantage in the suburbs its emphatic dome points a moral and caps the vast city.

Soon after the Restoration Charles II. contemplated the repair of the old cathedral, which had become dilapidated during the Commonwealth, and its choir converted into a barrack. In 1660 a commission was issued in which Wren was named to superintend the restoration. He was long employed in considering the best mode of effecting this. The cathedral had been partly repaired by Inigo Jones. But all these plans and projects of restoration were upset by the Great Fire in 1666, which completed the ruin of the ancient edifice and rendered them impracticable. Charles had, during his residence abroad, imbibed a taste for the arts, particularly for architecture, and upon his deciding to repair St. Paul's, to reinstate Windsor Castle, and to build a new palace at Greenwich, had Wren sent for from Oxford in 1661 to assist Sir John Denham, the surveyor-general, who of course understood nothing about architecture. Denham remained the surveyor with the salary; Wren as his deputy performing all the duties of the office. About this date he made the design for the Sheldonian Theatre at Oxford, which has a flat roof eighty by seventy feet, without arches or pillars to support it, and for the chapel of Pembroke Hall, Cambridge.

In 1665 Wren went to Paris for the purpose of studying its architecture and preparing himself for his grand work. From France he had intended to have passed into Italy and to study Vitruvius amidst the remains of antiquity; but this latter intent does not, unfortunately, appear to have been carried out. At this date the Louvre was in progress, one thousand hands being daily employed on the works; and he saw Bernini and Mansard. He surveyed all the great buildings in Paris, and drew plans of them. In a letter he says: "Bernini's design for the Louvre I would have given my skin for, but the old reserved Italian gave me but a few minutes' view. It was a fine little draught on five pieces of paper, for which he had received as many thousand pistoles."

After the nomination of the commission for building St. Paul's there arose much discussion and cavilling as to the plan. Wren's first design was to have had but one order and no side oratories or aisles, as appears in the model still preserved; but this part of his intention was overruled by the Catholic Duke of York (James II.), who looked forward to the reinstatement of his Church; and notwithstanding Wren protested even to tears it was in vain. Interference in matters of monumental art, irrespective of such a motive as actuated the Duke of York, is peculiarly incidental to England, where people in general understand so little of art. There is scarcely any great work of art, more especially, perhaps, of architecture, in which the artist has not been compelled to abandon somewhat of his original design. However, after considerable contention, Wren received an express order from the King to proceed; and thirty-five years from the commencement of the building the highest and last stone was laid by Christopher, the son of the architect. Thus was this splendid edifice completed in thirty-five years by one architect, under one Bishop of London, at a cost of only £736,000, which was raised by a small impost on coals; while St. Peter's, the work of twelve architects, took, under nineteen pontificates, one hundred and forty-five years to build.

One of the principal objections urged against the design of

St. Paul's is that Wren adopted two orders and not one, as in St. Peter's; though this, as we have already stated, was his original intention. But Bramante could resort to the quarries of Tivoli, yielding blocks of nine feet in diameter, for the columns, whereas Wren had only the quarries of Portland, which could not supply blocks of a greater diameter than four feet, and were even of this dimension not easily procurable, on which account, and also that he might preserve the just proportions of the cornice (which Bramante by the failure of the stone had been compelled to diminish), he finally adopted the two orders. Wren took a mean proportion between the relative heights of the dome of the Pantheon and of St. Peter's, which shows its concave every way, and is lighted by the windows of the upper order that serves for the abutment of the dome itself, which is two bricks thick, every five feet having a course of bricks eighteen inches long bonding through the whole thickness.

In consequence of the prejudice in favor of steeples, and that no disappointment might arise of the new church falling short of the old one, Wren, to give a greater height than the cupola would gracefully admit of, felt compelled to raise another structure over the first cupola. For this purpose he constructed a cone of brick, so as to support the vast stone lantern which surmounts it. This cone was covered with an oak roof, and this again with lead in the same manner as the other parts of the cathedral. Between this outside covering and the brick cone there is a staircase to the lantern, lighted from the lantern above. The inside of the whole cupola was painted by Sir James Thornhill, under the sanction and supervision of Wren, in eight compartments. The design of these decorations is admirably adapted to its purpose, and we trust that the public will not permit it to be changed, except the figure subjects be repainted in color, as originally intended.

A great deal has been said about Wren's intentions with regard to the decorations of the dome, etc. But he had probably very little experience in such matters. He had never seen the great Italian examples. He certainly proposed mosaic as the method, but his own notions did not extend beyond the suggestion of some arabesques in the cupola and figures in the lunettes under the gallery. This may be gathered from the large contemporary engraving of the cathedral by William Emmet. To so trifling an extent did his conceptions in the first instance venture in this respect that the major portion of the dome is represented in the engraving as panelled. This panelling was probably filled up in order to make an even surface for Thornhill's paintings. As matters of architectural decoration Gibbon's carvings even are out of keeping with the edifice. The charge of plagiarizing the work of Michael Angelo which is brought against Wren is sufficiently refuted by the comparison of numerous differences, both in general design and in detail.

The delight which we may conceive Wren enjoyed in contemplating the growth of the vast edifice which his creative genius had called into existence was not undisturbed or unalloyed. Many improper persons had been appointed with him in the commission, who, having selfish interests to serve and selfish feelings to indulge, were thwarted by the inflexible honesty of Wren, who exposed at once both their meanness and their ignorance. This was neither forgotten nor forgiven. It was not that his enemies endeavored to retard the progress of the building only. They procured a clause to be inserted suspending a moiety of his pittance (£200 a year) till the building should be completed. But Wren was not to be defeated by a cabal without a struggle. After having fruitlessly applied to powerful individuals, he brought his case before Parliament and obtained the justice he sought. His arrears of salary (£1,300) were ordered to be paid.

At the death of Queen Anne Wren lost the last of his royal patrons. His talents, his uprightness, and his fame were all forgotten. The disposal of patronage in the new reign was most corrupt. Wren was turned out of office at the age of ninety to make room for a court favorite, who was soon after disgraced on account of his dishonesty as well as his utter incapacity. Wren, as Sir Richard Steele said of him, possessed a virtue as fatal in its effects as poverty, — modesty!

Wren retired without a murmur from the busy hard world to his home at Hampton Court, and his son states that the vigor of his mind continued with a vivacity rarely to be found in persons of his age. It was not till within a short period of his death that he could relinquish the great aim of his whole life, namely, to be a benefactor to mankind. His chief delight to the very close of his life was to be carried once a year to see his great work. His dissolution was as placid as the tenor of his existence. On the 25th of February, 1723, his servant, conceiving that he slept longer after dinner than was his wont, entered his room and found him dead in his chair. He received the chill honor of a splendid funeral, and his remains were deposited in the crypt under the choir of the cathedral, where a tablet bears the following inscription: —

> "Subtus conditur
> Hujus ecclesiæ et urbis conditor
> CH. WREN,
> Qui vixit annos ultra nonaginta
> Non sibi sed bono publico,
> Lector, si monumentum quæris
> Circumspice."

Wren was not only appointed the architect of St. Paul's, but for the rebuilding of the whole city after the Great Fire. Space, however, will not permit us to enlarge on his magnificent project for raising a new metropolis and embanking the Thames, which was laid before the King and Parliament, but which vested interests prevented being carried out. Among his architectural works were the Monument; Greenwich Hospital; Hampton Court; St. Mary-le-bow; St. Michael, Cornhill; St. Dunstan in the East; St. Magnus, London Bridge; and the celebrated St. Stephen, Walbrook. Wren was nominated to the Savilian Professorship, and created LL.D. in 1651, chosen Fellow of All Souls in 1653, appointed Professor of Astronomy in Gresham College in 1657. On the death of Sir John Denham he became Surveyor of the Works, and was knighted in 1674. In 1680 he was elected President of the Royal Society. He was made architect and commissioner of Chelsea Hospital,

GEORGE FREDERICK HANDEL.

and Comptroller of the Works at Windsor. He was M.P. for the borough of Plympton in 1685, and for Weymouth in 1700, and was deprived of the surveyorship of the royal works in 1718 through political intrigues. His friend and associate, Sir James Thornhill, was dismissed at the same time, and died of grief.

GEORGE FREDERICK HANDEL.

[BORN 1685. DIED 1759.]

OF all the varied types of philanthropists, philosophers, men of science, humanitarians, and others, who have labored zealously and unselfishly for the good of mankind, there is not one, perhaps, who has rendered more signal service to all ranks and classes of society than the musician. He has not only afforded a refined and elevating occupation to thousands, not only invested the offices of religion with solace and consolation to many a troubled mind, but he has, over and over again, placed society under obligations of that peculiarly practical character, which is invariably regarded as the true test of sympathy with one's fellow-creatures. The assistance of his genius is enlisted for the purposes of charity more frequently than any other, not excepting that of the dramatic writer. A great catastrophe occurs, a terrible fire, an appalling inundation, which deprives hundreds, it may be thousands, of their all or of their means of livelihood. The aid of Handel or Beethoven or Mozart or Mendelssohn, or others of the great brotherhood, is invoked, the works they have left us are performed, funds are raised, and the impoverished relieved and comforted. It has been finely said of the masterpiece of him whose life and character we propose to consider, that "it has fed the hungry, clothed the naked, and fostered the orphan." That this is literally true, appears from the fact that within the space of a few years the sum of £10,300 was actually raised by performances of the "Messiah," and handed over to one charity alone, — the Foundling Hospital. Who can estimate the vast good that must have been directly effected in this one instance only? Enough, we may assume, at any rate, to entitle its author to a high place among the "benefactors" of mankind.

Like other men of genius, George Frederick Handel encountered the gravest obstacles at the outset of his career. Born in 1685, the son of a hard-worked doctor in Halle, he was destined for the law by the latter, who viewed with the utmost disquietude, and even disgust, the passion for music displayed by his son almost as soon as he could speak. Accordingly all instruments were removed out of reach; he was not allowed to visit friends who possessed any; and he was set to learn Latin as a solid corrective to his wild ambition. The boy, however, was not to be daunted. He outwardly submitted, but contrived after a time to procure an old clavichord, which he smuggled up to his bedroom, and on which he played away in fear and trembling during the long winter nights when every one else was asleep. One day, when he was about five years old, his father set off to visit a relative at the court of the Duke of Saxe-Weissenfelds. His little son implored to be allowed to accompany him. The request was refused; but, nothing daunted, he started off and followed, until his father was perforce compelled to lift him into the vehicle. On reaching their destination, while Herr Handel was paying his respects at the palace, George wandered off and found his way into the chapel, where, perceiving the organ open, he promptly sat down and commenced to play. The sounds attracted the Duke, — himself a musician, — and he proceeded to the gallery and discovered the boy at the instrument. At once struck with the marvellous talents he displayed, and having ascertained that his father was not doing much to help him, he remonstrated with the latter, and after some little difficulty obtained from him a promise to interfere no further with the evident bent of his son, impressing upon him that he should assist by every means in his power, instead of throwing obstacles in the way of such wonderful abilities. His father yielded, apparently with rather a bad grace, and Handel returned to Halle in the most exuberant spirits. To such an accident was due, in all probability, his preservation from a profession in which he would have lived and died a nonentity.

From that auspicious moment the history of Handel is but an unbroken record of the most intense, unremitting energy. Almost without cessation from that date to the year of his death he continued to pour forth the exhaustless resources of his prolific imagination. At seven years of age he was master of the spinet; at eight he was apprenticed to Sackau, the organist of Halle, where we find him composing a sacred *motet*, or cantata in eight parts, every week. He remained here four years, during which his industry and perseverance enabled him to make himself thoroughly acquainted, not only with the organ, but also with the violin, harpsichord, and hautboy. His predilection for the latter was very marked, as may be seen from the frequency with which he composed for it in after years. At fourteen he went to Berlin, where he attracted the attention of the Elector of Brandenburg, who wanted to send him to Italy; but both Handel and his father demurred to this proposal. He accordingly returned to Halle, where his old master, Sackau, had, with a candor that did him credit, admitted to every one that he could do him no more good, for the pupil knew more than the master. His father dying in 1703, he went to Hamburg; and Matheson, whom he met there, describes the effect his first public performance created, — an effect heightened by the fact that in a spirit of mischief he had previously affected great ignorance. Here his public career as a composer practically commenced, for on the 30th December, 1704, was performed his first opera, "Almira." It met with great success, as did his second venture, "Nero," early in the following year.

A remarkable feature in Handel's character appears to have been his independence, and a certain consciousness of, and pride in, his own genius, which, though very far removed from conceit, caused him to disdain offers of assistance of a flattering nature, which most men in his position would have accepted with effusive gratitude. An instance of this occurred in 1698, when he declined the Elector of Brandenburg's offer to send him to Italy. Having, however, in 1709 by his own industry and economy accumulated sufficient funds to take him there, he set out for the classic land of poetry, music, painting, and sculpture, and within a few months of his arrival at Venice he produced the opera of "Agrippina," which, composed at their request, was received with intense enthusiasm by the Venetians, and greeted with cries of *Viva el caro Sassone,* — "Long live the dear Saxon." It had a run of thirty nights. From Venice he went to Rome, where he was fortunate enough to obtain an introduction to Cardinal Ottoboni, one of the most appreciative and generous patrons that music has ever seen in Italy or elsewhere. The Cardinal himself was a man of great musical taste, and every week the *grand salon* of his palace was thrown open for the performance of an instrumental concert. At these *réunions* Handel proved a great acquisition, and it was under the Cardinal's roof that he composed "Il Trinonfo del Tempo." From Rome he went for a short time to Naples, where his "Acis e Galatea" took the town by storm. Towards the end of 1710 he returned to Germany, *en route* for England, and proceeded in the first instance to the court of the Elector of Brandenburg, who settled on him a pension of 1,500 crowns to induce him to stay. Handel, however, was bent on England, where he perceived his genius would have abundant scope; and the close of the year 1710 saw him in London, though he retained his German pension. In the spring of the next year the Elector of Brandenburg ascended the English throne as George I.; and it appears that Handel, in consequence of his determination not to return to Germany, had incurred his displeasure. This did not affect his reception in London, however, which was exceedingly favorable; and an opportunity soon occurred which enabled him to make his peace with the King. At a water-party given by the latter, Handel, through the interest of a friend at court, obtained an opportunity during the excursion of surprising his Majesty with some exquisite music he composed for the occasion. So great was the King's delight with the composition, that, on hearing whose it was, he instantly ordered Handel to be brought before him, and there and then conferred on him a pension of £200 a year, which was soon afterwards increased by £200 more, when he was intrusted with the musical education of the young princesses. From 1715 to 1718 he lived with Lord Burlington, a nobleman who, disgusted with the noise and bustle of the fashionable world of London, which then centred round the Strand and Charing Cross, had built for himself, we are quaintly told, "a country mansion in the fields of Piccadilly," to which he added a beautiful chapel, on the organ of which Handel found full scope for the exercise of his wonderful powers. At this time he had begun to attract attention, and in 1719 and 1720 he had reached what was not perhaps the most famous but certainly the most enjoyable period of his life. The two latter years he spent with the Duke of Chandos at Cannons. The Duke was one of the most remarkable men of his remarkable age. Having amassed prodigious wealth as Paymaster-General under Queen Anne, his chief ambition was to lavish it in the encouragement of art and in the advancement of the sciences. His residence at Cannons, near Edgware, was adorned and embellished on a scale of almost barbaric splendor; and not the least remarkable thing about it was, that, while marble, granite, and other indestructible material figured largely in its construction, to the cost of £230,000, yet within ten years of the Duke's death *there was not a trace of it to be found*, — a doom that had been foretold for it in the most singular manner by one who had been a frequent guest within its walls. Not far from the mansion was a church erected in the Italian style, and here Handel was installed as chapel master. Schoelcher relates that Dr. Pepusch was his immediate predecessor, but that the Duke, who "loved to worship God with the best of everything," one day invited Handel to play, and Pepusch, with a generosity that did him infinite credit, candidly admitted his rival's superiority, and resigned in his favor. Handel accordingly took up his abode for two years with the Duke, and set to work with characteristic energy. It was here that he composed the two Chandos *Te Deums* and the twelve Chandos *Anthems*, — works among the grandest he ever wrote, but now among the least known. Indeed, it is a singular reflection that, in spite of the appreciation of the great composer shown by the present generation, so prolific was his genius that a large proportion of his best and grandest compositions are lying at this moment dormant and unrecognized. Let us hope that some enterprising caterer for the musical public will erelong have the courage to disinter these masterpieces now lying buried amid the sands of an unmerited oblivion. Handel's operas, for instance, are now seldom, if ever, even mentioned, but many of them rival his oratorios in beauty; indeed, some of the most favorite airs in the latter are founded on a theme he had previously conceived in an opera. His Passion Music, too, is eminently beautiful, and it is said he himself preferred it to the "Messiah."

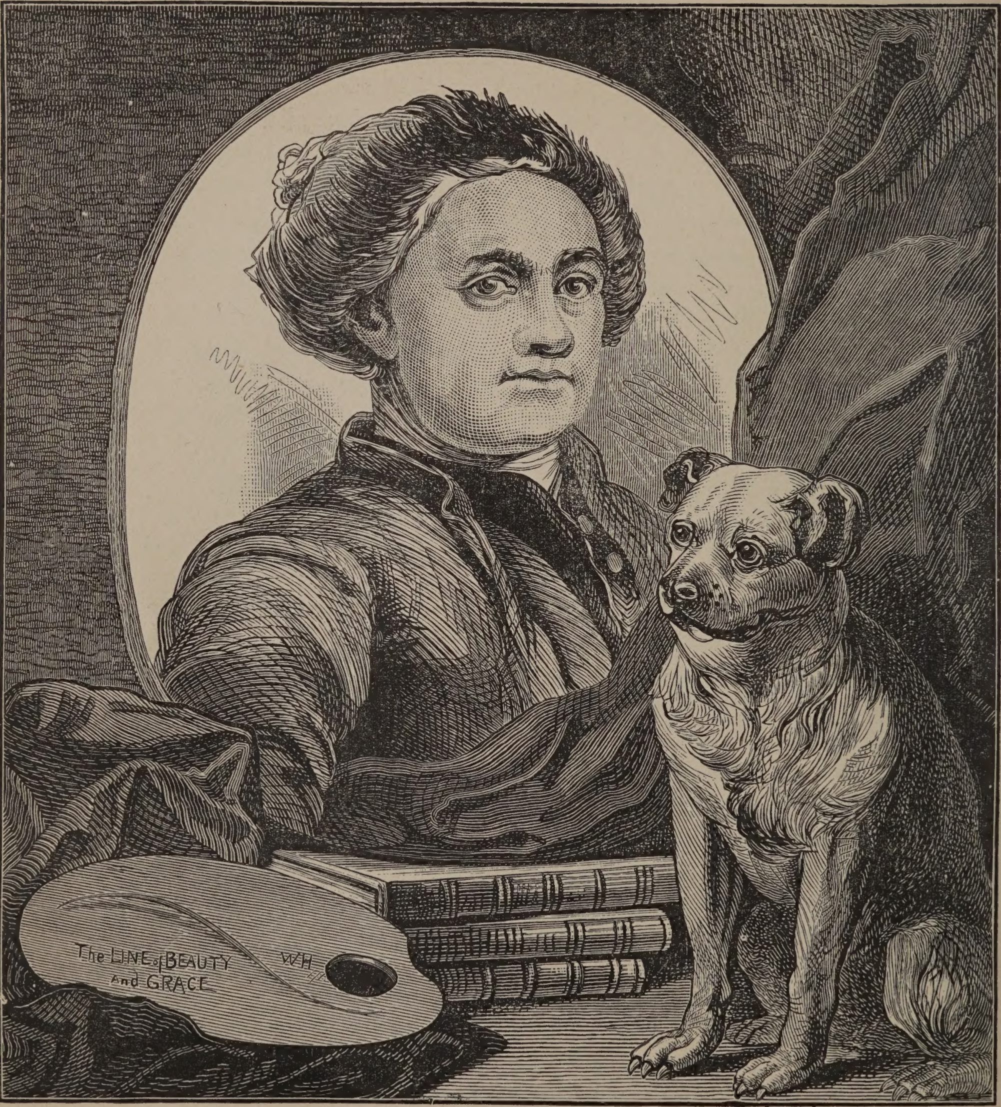
Handel appears to have considered that at Cannons he had reached the highest point of his fortunes. Under the protection of a powerful and munificent patron, with unlimited means at his command for the cultivation of his magnificent genius to the utmost, with his reputation as the first musician of the age fairly established, he seemed to have attained the summit of his ambition. Yet, at this time, the sweet harmonies of the "Messiah," the grand choruses of "Israel in Egypt," and the touching recitatives of "Samson" had not ravished the ears and delighted the hearts of the musical world. The great masterpieces, the names of which are household words in our day, were then unconceived, and yet their author was known as the most consummate musician of the day. What a pity it is that we never hear the works which had already gained for him a European reputation!

In 1720 Handel entered upon the direction of the Royal Academy of Music, and plunged into that troubled career of operatic management which in a few years ended in grave pecuniary embarrassment, and from which he was compelled to retire in disappointment and defeat. His independence of character soon involved him in serious difficulties with the aristocratic patrons of the Italian Opera, whom in those days it was indispensable to propitiate; and his frequent quarrels with the artists he engaged — Carestini, Cuzzoni, and finally Senesino — eventually culminated in a rival establishment being started, and an active cabal set on foot to injure him. It is not a pleasant task to recall these years of Handel's life, and we will not therefore linger over them. Suffice it to say that in 1741 he decided to leave England and try his fortunes in Ireland, whither he had been frequently invited. Accordingly, after paying a memorable visit to a friend in Leicestershire, — memorable for the fact that within the marvellous space of *twenty-four days* he composed both the "Messiah" and "Samson," — he made his way to Chester, whence, having rehearsed the "Messiah," he proceeded to Dublin, and immediately commenced a series of concerts which were well received. After a short delay the "Messiah" — or, as he then called it, the "Sacred Oratorio" — was performed, and produced a profound impression. After a prosperous stay of nine months in Ireland, he returned to England, and produced "Samson," which, favored no doubt by the reception of the "Messiah" in Ireland, was welcomed cordially by the musical world of London. From this time Handel continued to produce oratorios till within a short space of his death; but, with the exception of the two just mentioned, they were almost entirely pecuniary failures. Nothing daunted by these repeated failures, he again plunged into the cares and anxieties of management, and with an almost incredible fertility wrote opera after opera, of which no sooner was one produced than it was withdrawn for the next. Many of these he considered among his finest works, but they quite failed to satisfy the vitiated musical taste of that day. Handel, however, remunerated his performers so generously that in 1745 he found himself again in difficulties, and compelled temporarily to suspend payment. Thanks, however, in great measure to the steady friendship of George II., he persevered, and, being in the enjoyment of a permanent income of £600 a year from pensions granted him by the Court, he gradually retrieved his fortunes, and spent the closing years of his life in comfort.

Time rolled on, and when past seventy Handel had the misfortune to become almost totally blind; but the energy that had stood him in such good stead in earlier life did not desert him now, and the fine oratorio of "Judas Maccabæus," composed after his misfortune had overtaken him, testified that neither his genius nor his courage had departed with his sight. He continued up to the end to conduct his own oratorios at the organ, the only difference he made being to improvise the accompaniments, the orchestra waiting for the signal of a shake from him to introduce the choruses.

It must have been a touching sight to see the grand old man led on to the stage, tottering and helpless till he was seated at the organ, when, as it were, his genius would come to his aid, his imagination would take fire, and he would descant with all his old power and vivacity. His last public appearance was on the 6th of April, 1759, and he died peacefully that day week, the 13th, — a fancy he had frequently expressed that he might die on a Friday being thus strangely gratified. He was buried in Westminster Abbey; and amid all the mighty dead who lie there, his resting-place is not the least illustrious. Of him it may be truly said that he devoted a lifetime to one of the most ennobling of all avocations, which he did more to ennoble than any that went before or have come since. His style will be ever memorable, no less for the loftiness of his themes than for the grandeur and simplicity of his conceptions. While his compositions attract by their sweet and touching harmonies, they inspire awe and solemnity by the majesty of their choruses. In this combination Handel appears to surpass all musicians, though in elegance and brilliancy others may bear away the palm. The former are, perhaps, the characteristics which the ordinary mind can appreciate best, and they in all probability account for the popularity of those compositions of the great master in which they appear most conspicuous.

He was bitterly attacked during his management of the opera, but he opposed to all the intrigues and machinations directed against him the "triple brass" of an indifference founded on a consciousness of his own genius. When person-



WILLIAM HOGARTH.

ally crossed, however, his outbreaks were vehement, and the presence of royalty itself never prevented the free expression of his indignation, when, during the performance of any of his works, conversation was indulged in by those present, or want of appreciation otherwise shown. But these were faults incidental to his bold, self-reliant nature, and as such should meet with the forbearance of the historian. Take him for all in all, it will be long ere the world looks upon his like again, — long before the creations of his magnificent genius cease to move the hearts and to sway the imaginations of mankind.

WILLIAM HOGARTH.

[Born 1697. Died 1764.]

MORE than a century ago the fashion in art, in architecture, and in literature was classic. We see the evidences in the dreary edifices of that time, and we wonder at the statues then erected of Englishmen shivering in the toga or strutting in the buskin of antiquity. Literature was even more stilted, dreary, and unnatural. When Benjamin West painted the death of General Wolfe, he scandalized the world of art critics by the innovation of representing him in the costume of the time. Hitherto most pictures had consisted of Romans or Greeks; and when Sir Joshua Reynolds, a great stickler for classicality, saw the picture, he was compelled (though after great hesitation) to exclaim, "I am wrong, and West is right." To West seems to have been given the entire credit of the reform. In this, however, William Hogarth has been overlooked, — a natural consequence, probably, of the fact that he was never "fashionable." Charles Lamb has pointed out, with his accustomed felicity but with more than ordinary force, the intense power possessed by Hogarth in raising the humblest and most wretched scene into a subject of the highest moral interest.

He is very happy, for instance, in his description of the subject of Gin Street. He makes the remark, "I have seen many turn away from it, not being able to bear it. The same persons would perhaps have looked with complacency on Poussin's celebrated picture of the 'Plague at Athens.'"

Although taste has greatly changed since Hogarth's time, and those of his works which had much of the coarseness of the period never now see the light, yet his grander productions — those in which he attacked the vices and follies of the age — are classed, and most deservedly, in the front rank of art. Rising from obscurity, he made a name even in the age in which he lived, when there was but little patronage for true merit. He says, in his Memoirs: "I was born in the city of London, November 10, 1697. My father's pen, like that of many authors, did not do more than put me in a way of shifting for myself. As I had naturally a good eye and a fondness for drawing, shows of all sorts gave me uncommon pleasure when an infant, and mimicry common to all children was remarkable in me. An early access to a neighboring painter drew my attention from play, and I was at every possible opportunity employed in making drawings." His father consulted his son's indications of talent as far as his limited means would allow, and he was articled to a silver-plate, or what is technically called a "bright," engraver. But he aspired to something better than engraving griffins on teapots, and worked with enthusiasm to make himself a perfect draughtsman. Mr. George Augustus Sala, in his celebrated series of essays on William Hogarth, published in the early numbers of the "Cornhill Magazine," describes this portion of the great artist's career in a most interesting and exhaustive manner; in fact, the whole of the papers possess remarkable power. On leaving his master he established himself in business on his own account, and continued to practise the trade to which he had been bred, — engraving shop bills, coats of arms, and figures on tankards, etc. He then got employment in making designs and engraving frontispieces for publishers; the most important of these was a set to illustrate Butler's "Hudibras," published in 1726. Soon afterwards he began to seek employment as a portrait painter. These performances were generally small family pictures, which he calls "conversation pieces." They are about twelve to fifteen inches in height; and as his prices were low they were very popular. In 1729 an event of a romantic nature somewhat varied his pursuits, — he contracted a stolen marriage with the daughter of Sir James Thornhill, the then fashionable painter and member of Parliament. Sir James at first was furious, but after some time he relented, and a reconciliation was effected. It is said that the admiration Sir James had for a series of prints produced by Hogarth in 1731, and entitled the "Harlot's Progress," was the cause of his forgiveness. These were very popular and created a great sensation. Success encouraged Hogarth to produce another set in 1735, which he called the "Rake's Progress;" but the most popular of the whole series then, as now, was the "Marriage à la Mode." These were not engraved till 1745. For the "Harlot's Progress" twelve hundred subscribers' names were entered. The subject was dramatized in various forms, and it was even drawn on fans. The merits of the pictures, however, were not appreciated, and Hogarth, too proud to reduce his prices, determined to put them up to public sale; but instead of the usual form of auction, he devised a complex plan with the view of excluding picture-dealers, to whom he had a mortal aversion (an aversion which seems still to permeate the profession), and to induce men of wealth and position who wished to purchase to judge for themselves. But the scheme failed. Nineteen of the principal pictures produced only £427 7*s.*, not averaging £22 10*s.* each. The "Harlot's Progress" passed into the possession of Mr. Beckford, of Fonthill Abbey; but five pictures were destroyed at the fire. The "Rake's Progress" was purchased by Sir John Soane, the eminent architect, and are still to be seen in the museum in Lincoln's Inn Fields. "Marriage à la Mode" was sold in 1750, when only *one* bidder appeared, and to him they were knocked down at the preposterously low price of £115 10*s.* Mr. Angerstein purchased them for £1,381, and they are now in the National Gallery. It would be a curious thing to know how much they would bring at the present moment. In judging of Hogarth's talent there can be but little difference of opinion. He possessed that essential quality in a great artist of inventing his own subject, — unlike many of the profession, who go to other people's brains for their pictures. In fact, whenever he had to take a subject from any one else he always failed. Evidence of this fact may be seen at the Magdalen Hospital, — the "St. Paul Preaching."

When we look at the absolute *work* in his pictures, it is simply marvellous. The painting of the countess's head in the second picture of "Marriage à la Mode" is a wonderful specimen of technical skill. Again, how beautifully the perspective of the background is carried! One cannot help wondering if Hogarth really took out his perspective himself, instead of calling in architectural aid, as is done by some of our modern painters. In a brief article like the present it is impossible to dwell long on the wondrous beauties of that *one* series alone; but as long as art is appreciated, those six pictures will always be looked upon as the production of a man of the highest genius. At one time his earnings must have been wretchedly inadequate to his sustenance, and he must have made most of his income, to use a well-known phrase, from "Pot-boilers." He has left an account of his own life which contains some curious and interesting matter concerning his own modes and motives of thought. He also wrote verses, which, though containing some humor, were rugged, and in some cases coarse. His most important literary work is the "Analysis of Beauty," in which he endeavored to fix the principles of taste. He struck out the idea that the fundamental form of beauty, either in nature or in art, is the serpentine line. The work shows great originality and some power of analysis. William Hogarth marks an era, so to say, in English art, and his name is undoubtedly a "household word." It seems a disgrace to his profession that the house in which he lived so long at Chiswick is going to decay. True, one artist of well-known fame, a resident in the neighborhood, tried to buy it when it was put up for auction; but a tradesman in the vicinity, fancying from the anxiety shown by the artist that there was some unknown pecuniary value in the place, outbid him, and the country residence of the great English artist is now a dairy. The latter days of Hogarth were imbittered with his well-known squabble with Wilkes. It was a quarrel unworthy of either the painter or the politician. He spent the summer of 1764 at Chiswick, and the quiet and fresh air seemed to revive his strength so much that all thought he would long be spared. But the amendment was only temporary, and on the 26th day of October of the same year this truly great English painter passed to his rest.

The picturesque churchyard of Chiswick contains the plain tomb erected to his memory, which tomb some years ago was falling into decay, and which was, by the liberality of a lover of art, put into a decent state. How odd it seems that it is often to private generosity we have to look to keep for us the memorials of our great teachers! Hogarth's great friend, the friend he had so often painted and the friend to whom he was so greatly attached, wrote the epitaph on his tomb: —

> "Farewell, great painter of mankind,
> Who reached the noblest point of art,
> Whose pictured moral charms the eye,
> And through the eye correct the heart.
> If genius fire thee, reader, stay;
> If nature touch thee, drop a tear;
> If neither move thee, turn away,
> For Hogarth's honored dust lies here."
> D. Garrick.

Ruskin, the great art critic of the age, says that posterity will scarcely care about *our pictures* representing costume and manners of the Middle Ages, but will probably be much more interested in pictures depicting the costume and manners of the day at the present time. Has not Hogarth proved this opinion to be right? What a source of interest it is to go through folios of his engravings, to dwell on his pictures, to study the costumes, the furniture of the rooms! He painted life as he saw it, and consequently in his work there is that quality of individuality which stamps every picture that is painted from nature.

Setting aside the great artistic quality of his works, their truthfulness, as borne out by the literature of the day, gives them for the student a peculiar value, and places them among the truly reliable sources of contemporary history.

JOSIAH WEDGWOOD.

[Born July, 1730. Died Jan. 3, 1795.]

THERE are few lives the importance of whose bearings on industry and commerce it is more difficult to summarize than that of Josiah Wedgwood, the "father of British potters;" and fewer still whose influence has been, and will continue to be, so widely felt.

Born in an age when *real* art, as connected with fictile manufactures, was next to unknown, surrounded by difficulties not easy to surmount, with ignorance to deal with on every side, and possessed of anything but a robust constitution to grapple with his many obstacles, Josiah Wedgwood, by his own industry, his natural genius, his keen perception for the beautiful, his innate love for science, and his own indomitable perseverance, made for himself a name and a fame that are imperishable, and gave that impetus to the potter's art that has resulted in its becoming not only one of the most beautiful, but assuredly the most important and successful, of British branches of industry. He came into the world a member of a family of eminent potters, in the midst of a district consecrated to that art, at a time when rapid strides had begun to be made in the form and the decoration as well as in the "body" of various wares; and he devoted himself untiringly, throughout his long and busy life, to the improvement and development of that art, with a result that was as rapid as it has been firm and enduring.

Starting in life the youngest of a family of thirteen children; losing his father, Thomas Wedgwood, the well-to-do potter of

JOSIAH WEDGEWOOD.

the Churchyard Works at Burslem, when only nine years of age; apprenticed at the age of fourteen to his brother Thomas for five years; afflicted with illness and incapacitated from much bodily labor during his apprenticeship; thrown on his own resources when only a little over nineteen with a legacy of twenty pounds to start in life; entering into partnership first with Harrison, a practical potter, and next with Whieldon, the most eminent potter of his day, and with whom he produced many new varieties of wares and glazes; commencing business entirely on his own account, and working energetically at his trade, — Josiah Wedgwood found his genius and enterprise so well rewarded that he gradually increased his operations until they resulted in the founding of a new village, "Etruria," by him, and the establishment of a trade that has been of immediate practical benefit to thousands of people in the district, and, collaterally, to the whole of the civilized world.

He thus, by improving and assisting to develop an important branch of industry, and by his many and valuable inventions and discoveries connected with that art, became a benefactor to mankind, and sowed the seeds from which have sprung England's proud pre-eminence in ceramic art.

But it was not only in pottery that Wedgwood benefited mankind. He did much to improve the roads in his native county "as a means to the end" of developing its trade, and he was one of the most energetic of the promoters and supporters of water communication by means of canals between town and town. In conjunction with his friend Brindley, and with the incentive of the Duke of Bridgewater's success and his ultimate aid, the "Grand Trunk Canal" was formed, and the proud task of cutting the first sod was assigned to him. "If for no other reason," it has been remarked, "the part he took in carrying out to a successful issue the scheme of canal communication, to which undoubtedly the Staffordshire Potteries owe their prosperous increase, would fully entitle Josiah Wedgwood to the thanks of his country and to be ranked among the foremost benefactors of mankind."

Of the character of Josiah Wedgwood it has been written in these words, that he was "one of the most wonderful of all the 'self-made men' a nation of great and noble geniuses has ever produced. Not only did he stand out as a clear statue from the men of his own time, but in high and bold relief from those of every time and every age. Original in thought, far-seeing and clear in his perceptions; with a mind capable of grasping the most difficult problems and working them out to a successful issue; with a firmness of purpose and a determination which carried him safely through all his schemes; a power of wrestling with and overthrowing every obstacle which came in his way; a genius which soared high above his fellow-laborers in art, and led them on to success in paths unknown to them before; with an energy, a perseverance, and an industry which never flagged; an unswerving fixedness of purpose which yielded not to circumstances, however adverse they might seem; with a heart warmed by kindliness, goodness, and charity to all men, and a mind imbued with that true religion, a conscientious discharge of his duty to God and man; with a strict probity and a scrupulous adherence to all that was honorable and right,—Josiah Wedgwood hewed out for himself a path through the world-jungle which surrounded him that led him to the highest point of worldly prosperity, and earned for him a name which has been, and always will be, received with honor." It is not always that laudation on tablet or tombstone is deserved by those whose memory is intended to be perpetuated, but in the case of Josiah Wedgwood the lines in Stoke Church were truly merited. The tablet, besides bearing a Portland and an Etruscan vase, has a sculptured medallion of the "father of potters," Josiah Wedgwood,

> "Who converted a rude and inconsiderable manufacture into
> an elegant
> Art and an important part of national commerce.
> By these services to his country he acquired an ample fortune,
> Which he blamelessly and reasonably enjoyed,
> And generously dispensed for the reward of merit and the
> relief of Misfortune.
> His mind was inventive and original, yet perfectly sober
> and well-regulated;

JOHN FLAXMAN.

His character was decisive and commanding, without rashness
or arrogance;
His probity was inflexible, his kindness unwearied;
His manners simple and dignified, and the cheerfulness of
his temper was the natural reward of the activity
of his pure and useful life.
He was most loved by those who knew him best,
And he has left indelible impressions of affection and
veneration
on the minds of his family, who have erected this
monument to his memory."

JOHN FLAXMAN.

[Born 1755. Died 1826.]

"THE uneventful lives of artists" is a common platitude, whereas the execution of grand works in painting and sculpture is among the greatest events in history, and the thinking world shows that it considers them to be so by its undying appreciation. Of all the eventful history of mediæval Italy, its art events are beyond all compare the greatest; and now that all her stage properties and pageantry are relegated to oblivion, her poets and artists reign supreme. To common minds an event is only some occurrence which strikes them between the eyes of consciousness with mischievous violence. Such passively witness the virtue of the modest and unobtrusively progressive, but pass it by with very slight, if any, consideration. Thus it was with the genius of John Flaxman, whose life was in the better sense of eventfulness grandly eventful, but who was allowed to enter into a European fame before Englishmen had at all adequately recognized what manner of man they had as a glorious possession.

In forming an estimate of Flaxman's genius, we must not lose sight of the nature of his constitution; his delicate frame emancipated his intellect, and left it supreme. His works, therefore, although they manifest to the full a spiritual and conceptive excellence, often lack, especially the larger, some degree of physical completeness. This is a defect; for perfect art, as the perfect manhood, consists in the combination of the two. Art to be complete must be perfect in both form and spirit. It is useless to urge that the intellectual conception is, in all the arts, the "better part;" for should a beautiful thought be imperfectly embodied, it is sent forth halt and limping to the world, and fully justifies the reproaches of criticism. To note a fine thought would be sufficient if the different arts did not demand special forms of expression, and perfection in those forms. But such a spirit as that of Flaxman descending upon an art which had been, till his coming, of the earth earthy, breathed into it at last the breath of life, and for this benefaction we must be devoutly thankful.

John Flaxman was born in York, July 6, 1755. He did not, as many celebrated artists have done, work his way from some uncongenial sphere to art, but was early and quietly inducted into his profession, and must have very early become acquainted with the technique of sculpture through his father, who was employed for many years by the sculptors Roubillac and Scheemakers as a moulder, and who himself kept a shop for the sale of plaster figures from the antique. This shop was the young Flaxman's first art-school, for the delicate boy very early took to the pencil and to kindred studies. As he advanced in years, and improved in health and strength, he seems to have resolved to become a sculptor, and in due course became a student of the Royal Academy. One of the earliest to recognize the boy's talents was the Rev. Mr. Mathew, to whose wife, a gifted and agreeable woman, he was soon after introduced. He was some eleven years old when he first saw this fascinating lady at her house in Rathbone Place, where thenceforth he frequently repaired to hear her read Homer and Virgil, and discourse upon sculpture and verse. Here he was encouraged to study the classics. However, there is no evidence that he ever attained to any great proficiency in these studies. His education was of a very desultory kind; he attended no college, and distinguished himself in no eminent seminary; he gathered his knowledge from many sources, and mastered what he wanted by some of those ready methods which form one of the strongest proofs of genius. It is said that while Mrs. Mathew read Homer he sat beside her making sketches of the subjects of such passages as caught his fancy. These juvenile productions are still preserved. The taste displayed in them induced Mr. Crutchley, of Sunning Hill Park, to commission him for a set of six drawings. The praise bestowed on those early and imperfect works was grateful to the young artist.

In his fifteenth year Flaxman became a student of the Royal Academy. In 1770 he exhibited a figure of Neptune in wax, and in 1827 the statue of John Kemble in marble. These were his first and latest works, and between them lies a period of fifty-seven years, intensely devoted to the pursuit of sculpture. He was soon known at the Academy as an assiduous and enthusiastic student. His small slim form, his grave and thoughtful looks, his unwearied application and undoubted capacity, won upon the hearts of all who watched him, and he began to be spoken of as one from whom much was to be expected. Among the students his companions were Blake and Stothard. During his teens he made some attempts with oil colors, and it is said with such success that one of these was afterwards sold as the work of an old master.

After gaining the silver medal he entered the contest for the gold with one Engleheart, and lost. The general opinion was in favor of Flaxman's work, but the Royal Academy approved and rewarded his rival's. Flaxman, although somewhat mortified, redoubled his exertions. But he had now to win his bread, and to turn somewhat aside from the paths that he most loved. It is as well, perhaps, that men of imaginative genius should serve an apprenticeship in the rough workshop of the world. During this period he designed and modelled for the Wedgwoods. This employment was so far profitable that it maintained him; but then he was a frugal person. From boyhood to old age he lived the same quiet, simple, secluded sort of life, working by day and sketching from the Bible, the "Pilgrim's Progress," and the poets, and reading by night.

During the ten years which preceded 1782, Flaxman exhibited some thirteen works at the Royal Academy, including portraits in wax and terra-cotta, also a sketch for a monument to Chatterton. The subjects were "Pompey after his Defeat," "Agrippa after the Death of Germanicus," "Hercules with the Poisoned Shirt," "Acis and Galatea," the "Death of Cæsar," etc. All were less than half life, and none of them were transferred to the marble, which would have been the case if patronage had smiled. In 1782 he quitted the paternal roof for a small house and studio in Wardour Street, there collected casts from the antique, etc., set his sketches in order, and took unto himself a wife, Ann Denman. She was amiable, had a taste for art and literature, and was an enthusiastic admirer of his genius. When the old bachelor, Sir Joshua Reynolds, heard of the marriage, he told Flaxman that he was ruined as an artist. Upon this he resolved to visit Rome, and to negative Sir Joshua's prediction. Between his marriage and departure for Italy he exhibited seven works, among these the monuments to Collins the poet and to Mrs. Morley, the one for Chichester and the other for Gloucester Cathedral. Having disposed of all his works, he set off for Rome in the spring of 1787.

In Rome he was naturally struck with the beauty of the remains of ancient art as well as with the grandeur of the modern. Flaxman, fully understanding the motive of mediæval Italian art, conceived the design of devoting his powers to the Protestant cause, and the greater and most noble portion of his works bear the impress of this resolve. His life-work was symbolized in his St. Michael beating down Satan; very many of his works illustrate, in various forms, the triumph of Good over Evil. In such designs his genius was pre-eminent.

It was in Rome that he executed his famous outline illustrations of Homer, Æschylus, and Dante, which have earned for him a European reputation. Patrons now began to make their appearance. For Mr. Thomas Hope he executed a group of Cephalus and Aurora; for the eccentric Frederick, fourth Earl of Bristol, a group of four figures of heroic size, representing the fury of Athamas, for the ridiculously inadequate sum of £600. He next undertook the restoration of that splendid torso, the "Torso," which is generally supposed to be a fragment of a Hercules. The remains of ancient sculpture in Italy engaged not a little of Flaxman's attention. He made many drawings, and still more numerous memoranda, subsequently embodied in his lectures on sculpture.

After spending upwards of seven years in Rome, thus assiduously working as well as comparing the extravagance of Bernini with the temperance of the antique, and in disciplining his eye in a severe school, — having during this time been elected member of the Academies of Florence and Carrara, — Flaxman prepared to return home.

On his arrival he found Bacon, Nollekens, and Banks fully employed. He took a house in Buckingham Street, Fitzroy Square, erected shops and studios, and made his reappearance in England known by his monument to the Earl of Mansfield, which had been commissioned while he was in Italy. For this fine work, erected in Westminster Abbey, he received £2,500. During the progress of this monument he wrote the poem and made the designs which he dedicated in a book to his wife. He was elected an Associate of the Royal Academy in 1797, and in his forty-fifth year full Academician. Then in succession came the monuments to Sir William Jones for Oxford; his proposal for a statue of Britannia, two hundred feet in height, to be placed on Greenwich Hill; the noble works, the monuments in memory of the family of Baring, embodying the words, "Thy will be done," "Thy kingdom come," "Deliver us from evil;" those to Mary Lushing, Mrs. Tighe, Edward Balme, and the Rev. Mr. Clowes, of St. John's Church, Manchester. Flaxman executed also several historical monuments, but these are not his ablest works. They were embodiments of paragraphs from military gazettes, done in marble, in which British Lions, Victorys, and Britannias, the usual properties, extensively figured. Much of his poetic invention forsook him when he approached modern subjects. The statue of Howe, in St. Paul's, was so clumsy, that after its erection months were consumed in chiselling it down. He adopted a perilous course in working his marbles from half-sized models. His physique may have led him to this. Latterly, however, he became sensible of the disadvantages of such a course, and modelled the group of the Archangel overcoming Satan of full size. Among his statues were those of Sir Joshua Reynolds, Sir John Moore, and Pitt. But space does not permit the enumeration of all his works, which may be divided into four kinds, — the religious, the poetic, the classic, and the historical. In each of these he has left specimens which give him high rank, but in all of them he has not attained the same degree of excellence. In the historical he was embarrassed with the unpoetic costume of those days of buttons and capes; in the classic he was compelled to follow the antique; but in the poetic and the religious he has been surpassed in purity and simplicity by no modern sculptor. His religious compositions consist of groups and figures embodying moral and spiritual passages from Scripture ; they are generally of moderate dimensions, carved in moderate relief, sketches in plaster and in outline. Of these there cannot be less than a thousand. It was a wish that possessed him early in life to dedicate his genius to morality and devotion. That he did not accomplish all that he wished in this direction was the fault of the age, not his. We cannot, however, dismiss a partial enumeration of his work without mentioning his famous bas-relief of Mercury and Pandora, and the alto-relief of the "Deliver us from Evil." The original models of many of his fine works, including the St. Michael, together with numerous drawings, are collected in the hall of University College. In 1811 he delivered the first of his course of lectures on sculpture at the Royal Academy.

Mrs. Flaxman died in 1820, and from this bereavement something like a lethargy came over his spirit. He was now in his sixty-sixth year, and surrounded with the applause of the world. His studios were filled with commissions; among these was that of the Archangel Michael, already alluded to, and the famous Achilles' Shield, designed for Messrs. Rundell and Bridge, the eminent silversmiths.

The exhibition of mind in works of art is, as we have admitted, the "better part;" but it is only a part, — the grander and nobler part, but not the whole. Material blemishes may be regarded with leniency in works thus endowed, but for the absence of intellect there is no redemption. It was in that intellectual and "better part" that Flaxman was pre-eminent, and this pre-eminence gained for him the admiration of the civilized world, and the title of public benefactor.

It was on the 2d December, 1826, that a stranger called upon him to present a copy of a work entitled "Al Ombra di Flaxman," which its author had no sooner published than he found to his consternation that the great artist was living, and had now sent through his envoy a copy and an apology. Flaxman smiled and accepted the volume with unaffected modesty. On that day the great sculptor was well and cheerful; but the next Sunday he went to church, felt himself suddenly affected with cold, refused all medicine, and went to bed. An inflammation of the lungs was the result of the cold, and all attempts to arrest the deadly malady were in vain. On Thursday, the 7th December, 1826, he died without a struggle, and on the 15th of the same month he was buried with artistic honors in the churchyard of St. Giles in the Fields, — the Flaxman whose remains deserved a tomb in either Westminster or St. Paul's.

II.

DISCOVERY AND EXPLORATION.

CHRISTOPHER COLUMBUS.

CHRISTOPHER COLUMBUS.

[Born *circa* 1435. Died 1506.]

It has been said, not without considerable show of truth, that the man deserving most gratitude from the human race is he who shall have made two blades of grass grow where but one grew before. Of course, the adage seeks to inculcate the enormous benefit conferred upon his species by a judicious promoter of agricultural industry; and seeing that the cereals, the suppliers of the "staff of life," are, after all, themselves but grasses, it may be allowed that the statement is not an overstrained one. Carry out the proposition to its logical sequence; and if the man who increases the fertility of lands already known be worthy of praise, what may not be said of one who gives to his fellow-men new and luxuriant territories, where labor may put forth fresh energies in a new field, and the overstocked populations of older countries may find a profitable sphere for the employment of those forces which at home would become useless, if not positively harmful, for want of a fitting scope? So far as the great mass of mankind is concerned, it may well be doubted whether any men have more greatly conduced to the temporal good of society at large than those great explorers who, by their discoveries in past years, have wellnigh doubled the area of the known world, and knit together lands already known to their predecessors, but separated by the difficulties of travel almost as widely as though they had not existed for one another. Such names arise to the mind as those of Sebastian Cabot; Prince Henry the navigator, to whom the world first owed its knowledge of the West African coast; Nunez de Balboa, unhappy discoverer of the South

Sea; Bartolomeo Diaz, who changed the terrible Cape of Storms into the Cape of Good Hope, and so opened up Oriental commerce; but first and readiest of all comes that of the great Genoese, Christopher Columbus, to whose undaunted resolve the world owes the final possession, in any practical sense, of the great continent of North America, now one of the main granaries of the earth, so that, after all, the praise awarded to him may in a sense be referred to the saying with a mention of which we started.

Christopher Columbus, or Colon, — the more generally accepted name being only a Latinized form of his patronymic, after a common fashion of that day, — was of humble, if not of low origin, and was born in or about the year 1435. Like other great men, divers towns have contended for the honor of having given him birth, among which, perhaps, the best claim was put forward by Cuccaro in Montferrat; it is, however, now pretty firmly established that Genoa has the true right. Similarly, the occupation of his father has been under dispute; whether he was a weaver, as some say, or only a bargeman, as others think, it is certain that he contrived to give the boy what was, for his station, an unusually liberal education, including Latin, geometry, and astronomy. His seafaring life, which began about his fourteenth year, was at first confined to coasting trips in the Mediterranean; but as his age increased his voyages extended to the North Seas, where the Icelandic trade was then in a flourishing condition. To this succeeded a more adventurous kind of service under a noted corsair of his own family, who ravaged the neighboring seas, making impartial war alike upon Venetians and Mahometans. This was brought to a summary close by the destruction of his ship, which caught fire in an engagement; and the young Columbus saved his own life by swimming.

We next find him settled in Lisbon, where his brother Bartholomew was already living as a maker of charts; and shortly after he was married to the daughter of Palestrello, one of the sea-captains who had been employed by Prince Henry of Portugal, called "the navigator," to whom reference has already been made, and the results of whose discoveries now opened a field for the employment of Columbus's energies during several following years, when he was chiefly occupied in trading with Madeira, the Canaries, and adjacent settlements. Owing to his matrimonial connections, great opportunities had been afforded him of studying such maps and other records of African discovery as had been made in connection with former Portuguese exploration; and the result, coupled with his own observations during his trading voyages, was a settled conviction, not only of the existence of hitherto unknown lands in the far West, but of the possibility of reaching the East Indies, then the great end of Portuguese commerce, by other than the circuitous route round the Cape of Good Hope. Having formulated his ideas, the next step was to find a power able and willing to assist him in carrying them out. The Republic of Genoa, to whom, actuated by patriotic motives, he first proposed the scheme, declined it, influenced both by parsimony and a lack of enterprise. His next application was made to the then reigning King of Portugal, Don John II., who received him graciously, and referred the plan to a committee. The individuals of whom this consisted, actuated by base motives, contrived surreptitiously to fit out a small expedition, which secretly started, furnished with copies of Columbus's own charts, upon the course proposed by the navigator himself, with the intention of forestalling him. The attempt, however, proved abortive, and the vessel returned to Lisbon. So incensed was the great navigator, on hearing of this treachery, that he at once transferred his offers to the Court of Spain, whither he proceeded, despatching his brother at the same time to England to make overtures to Henry VII. similar to those which he himself was making to Ferdinand and Isabella. The latter were for some time held in abeyance, and ultimately rejected, owing chiefly to the engrossing nature of public affairs, Spain being embroiled in the war with the Moors; consequently Columbus prepared to start for England, where Bartholomew, after a lengthened captivity among pirates, had at last received favorable entertainment. But a new mediator interposed in the person of a Franciscan dignitary, Juan Perez de Marchena, who, taking up the cause from feelings of friendship no less than from national pride, worked so hard for the advancement of the scheme that Queen Isabella herself undertook its advocacy. Partly owing to the over-caution of Ferdinand and partly to the parsimony of his advisers, rejection once more ensued, and the project of application to England was resumed. At this critical juncture the fall of Granada put an end to Spanish embarrassments, and, some wealthy patrons of Columbus having at the same time come forward in his behalf, a treaty was finally signed in April, 1492. By this he was appointed High-Admiral of Spain in all seas he might discover, as well as Viceroy in all new islands or continents. A tenth part of all accruing profits was settled upon him and his heirs in perpetuity, and, in consideration of the advance of one eighth of the necessary expenses of the expedition, he was also to receive an equitable share in all commercial advantages to be gained.

On the 3d of August, 1492, Columbus at length set sail from the port of Palos, in Andalusia; the tiny fleet which was to accomplish so great a revolution in the world's history consisting of no more than three caravels, manned by one hundred and twenty men. After a run to the Canaries, where a delay was made for the purpose of refitting, he once more started, steering due west, on the 6th of September. Scarcely had they lost sight of land when the crew became uneasy, both at the novel variation of the compass and at the unaccustomed aspect of the unknown sea into which, driven by trade-winds, they were careering. For three weeks the spirit and indomitable cheerfulness of their commander kept them under partial control; but at the end of that time there broke out an open mutiny, which it required all the diplomacy of Columbus to quiet for a time; indeed, threats were made against his life should he persist in the voyage. Shortly after this, insurrection made new head, and became so formidable that the commander was forced in self-defence to promise a return home should land not be discovered within three days' time. It was on the night of October 11 that Columbus, gazing anxiously towards the west, perceived a moving light, and almost immediately a cry of "Land!" was raised. A complete revulsion of feeling followed on the part of the crew, and their commander was now hailed as little short of a divine leader. This first-discovered land proved to be an island, one of the present Bahama group. It was taken formal possession of for the crown of Castile and Leon, under the name of San Salvador. Among other discoveries made during this first voyage were the large islands of Cuba and Hispaniola, on the latter of which — now known as San Domingo — Columbus established a garrison, and, taking with him a few of the natives, together with samples of the indigenous produce, started for Spain. On the way the little fleet, already weakened by the loss of one vessel, was nearly cast away in a tempest, but finally sought shelter at the Azores, and, after touching at Lisbon, reached the port of departure exactly seven months and eleven days from the time when it had set out. The rejoicings in Spain, as may be imagined, were great. At a court held at Barcelona all the stipulations originally made by Columbus were ratified, his family was ennobled, and he himself was appointed to the conduct of a new expedition on a vastly larger scale. This, which left Cadiz on the 25th of September, 1493, comprised seventeen vessels, on board of which were fifteen hundred souls, numbering among them certain men of family, who proposed to push their fortunes in the new country. A more southerly course than on the former occasion led to the discovery of the Leeward Islands, then inhabited by the fierce race of the Caribs; but on reaching Hispaniola it was found that the natives, irritated by the misconduct of the Spanish garrison, had risen and massacred them. Columbus declined to undertake retaliatory measures, but established a stronger settlement, to which he gave the name of Isabella, in honor of his patroness; and, having reduced matters to greater order, once more departed, leaving his brother Diego as governor of the island. The discovery of Jamaica followed, and on his return the high-admiral met with his brother Bartholomew, who arrived with reinforcements and supplies from Spain. The Indian war which succeeded resulted in an almost total subjugation of the native tribes, many of whom were reduced to servitude, while from all heavy tribute was exacted. During this period the enemies of Columbus had not been idle, and the accusations against him had become so serious that he resolved to plead his cause in person. Therefore, leaving Bartholomew as his adelantado, or lieutenant-governor, he set out for Spain, where he arrived, after severe hardships, in 1496. After many delays he contrived to reassert his influence with the sovereign, his native prudence and calmness being greatly aided by his presents of gold and other treasure; so that he once more took his departure in high favor, in May, 1498, with a squadron of six ships. This third journey, however important in its results, was less satisfactory at the time. Trinidad was discovered, as well as some portions of the South American coast; but mutiny and discontent at San Domingo occasioned the admiral fresh anxieties, and his life was once more imbittered by the intrigues of his enemies, who at length contrived to influence even Isabella against her former favorite. First of all, his assured rights were interfered with by a new grant of exploration to his rivals, Alfonso d'Ojeda and Amerigo Vespucci. This was followed by a revocation of his commission as viceroy. Francesco de Bovadilla, who was sent out in his room, had the arrogance to send both Columbus and his brothers home in irons. But the act proved his own ruin. He was disgraced, while his victims were liberated and rewarded. Still the former honors were not restored, which so worked on the feelings of Columbus that he ever after preserved his fetters as a memento of injustice. It seemed as though his star was on the wane. His last voyage began in May, 1502; and the first incident was a terrible hurricane, occurring soon after his arrival at San Domingo, in which a treasure fleet starting for home, and the departure of which he had vainly attempted to delay, was almost entirely lost. True, his own fortune was saved, while Bovadilla and other of his bitterest enemies perished; but even this event was made the cause of charges of sorcery against him. Then came his disappointment in not finding the strait which he had hoped existed near Panama, and shipwreck on the island of Jamaica, whence he was only rescued, after a period of the greatest misery, by a fleet from Hispaniola. At length, reaching Spain with one solitary vessel, he found, on landing at San Lucar in December, 1504, that Queen Isabella was dead; and from her surviving consort, Ferdinand, he could obtain no redress, and had even to undergo the insult of being offered a pension in exchange for his former dignities.

So, broken down with disappointment and illness, Columbus breathed his last at Valladolid, on May 20, 1506, his death being distinguished by the same piety and calm faith which had marked his life. King Ferdinand, actuated possibly by remorse, honored his body with solemn obsequies, and confirmed, though tardily, the rights of his family. His remains, originally deposited at San Domingo, were transported in the year 1795 to the cathedral of Havana, in the island of Cuba, where they now repose.

"America," says M. Henri Martin, "ought to bear no other name than that of Columbus. Posterity has been equally unjust towards Columbus with the crown of Spain: the latter refused him the just recompense of his labors; the former has denied him the honor of naming the world that he found. The Florentine, Amerigo Vespucci, has robbed the great Genoese of his glory by the most gigantic fraud that history records. Amerigo having made, in 1499, a voyage to the coast of the new continent, seen the previous year by Columbus, pretended to have anticipated Columbus by a year, whom he had in fact only followed. His letters, addressed to such illustrious personages as Lorenzo di Medici and the Duc de Lorraine, had a vast publicity; that to the Duke was printed at St. Dié in 1507, and the Lorraine editor thereupon proposed to give the name 'America' to the fourth part of the globe, which he believed Vespucci had discovered. This proposal, made by an unknown person in an obscure corner of Lorraine, has been universally adopted, to the end that nothing should be wanting that might make the unhappy destiny of Columbus complete."

WALTER RALEIGH.

[Born 1552. Beheaded Oct. 29, 1618.]

HISTORY, clothed as with cloth of gold in the "spacious times of great Elizabeth," turns ruefully to grope among the shameful chronicles that make up the reign of her successor. Few meaner figures have disgraced the throne of England than that crowned buffoon. Even James I., however, has his uses. The weakness and folly of the effeminate pedant serve to bring into bolder relief the heroic qualities of the manlike queen. As we read of fleets and armies disgraced abroad and despised at home, we turn with a prouder attachment to the days when the lion-voice of Elizabeth defied the whole might of Catholic Europe; when English soldiers triumphed in the Netherlands and English sailors humbled the pride of Spain on every sea; when Drake with a few small vessels circumnavigated the world, and Raleigh sailed boldly forth to discover unknown lands. The last great name is imperishably associated with the glory of Elizabeth and the shame of the mock Solomon who succeeded her. Ever puzzled how to deal with heroes, James could make no better use of the discoverer of Virginia than to murder him.

Towards the end of 1616 Walter Raleigh had been for twelve years a prisoner in the Tower. An English Damocles, his living death had compelled him to behold the axe of the executioner continually suspended above him by that frail thread, a king's caprice. One ray of sunshine, in the shape of his devoted wife, alone lightened his captivity and brightened his lot. A mournful household must it have been at best. Great was her love who could endure to look, morning after morning, into the eyes of her husband, and dread lest before another sun rose the blow of the headsman should have sealed them forever to this world, and her affection there. At the

WALTER RALEIGH.

date, however, when our fancy transports itself to Raleigh's prison, the expectation of deliverance had come, like a guest from heaven, to the hearts of its two inhabitants. Money, poured forth like water, had purchased the intercession of the King's new favorite, the contemptible Villiers, and a pardon was already promised. His thirst for adventure reawakened, the veteran explorer hoped in a few months to set sail with a squadron for Guiana, in search of the gold-mines which he had persuaded himself and the court existed there. Just while he is most occupied with the project, a new prisoner enters the Tower; and Raleigh, looking one day from his grated window, sees led into the gloomy fortress the ever-infamous Carr, Earl of Somerset, now under sentence of death for the poisoning of Sir Thomas Overbury. Sir Walter turned to those who stood gazing with him on the scene, and expressed the sentiments it inspired in him. "The whole history of the world hath not the like precedent," said he, "but in the case of Haman and Mordecai. A king's prisoner to purchase freedom, and his bosom favorite to have the halter!" Some parrot of the Tower, in the shape of an obsequious courtier, hastened with the words to the King's ear. James listened, and smiled maliciously. "Raleigh may die in that deceit," said he. Before two years were over Carr, a wretch many crimes worse than Haman, had escaped, by favor of the King, the gibbet he richly deserved, and Raleigh, the English Mordecai, had been foully put to death.

Britannia may well turn with shame and loathing from the record of this great man's fate. One of the most gallant spirits of his age, he had a patriotism that was as sagacious as ardent. Chiefly to Raleigh do we owe it that the Spanish Armada was met while still at sea. He urged that ships could be moved from point to point more swiftly than soldiers. The whole land-forces of England would not, if assembled for the defence of her coasts, prevent a daring and skilful invader from landing in whatever quarter of the realm he pleased to select. The best defences of the island were its fleets. With the Channel for an arena and its havens to cover them, English seamen might demolish piecemeal the mightiest armament that even Spain could place upon the ocean. The wise counsels of the Devonshire hero prevailed. A goodly array of vessels was provided. The elements fought on the side of English valor; and a few months later there remained nothing of the Armada so haughtily misnamed Invincible, save the triumphant deliverance of the realm it had menaced, and the deep disgrace that blackened the renown of Spain. In the year 1588 was laid the foundation of England's naval supremacy; and Walter Raleigh was among the greatest of the laborers who gave their souls to the work. He looks out on us from the past, an early example of the spirit of conquest that flamed forth in its crowning splendor when, two centuries later, the harbors of France and Spain could hardly contain the fleets that huddled there in inglorious safety, and the name of Nelson had replaced that of Neptune as ruler of the deep.

The incidents of Raleigh's life glide before us, changeful and vivid. While still a youth, he served his apprenticeship to arms in the Huguenot wars of France, and was saved, history knows not how, from the massacre of St. Bartholomew. Deeds done in Ireland and the Low Countries, and a voyage in the company of his relative, Sir Humphrey Gilbert, acquired for him a celebrity that landed him in due time at court. The cloak said to have served as his introduction to Queen Elizabeth has been rendered, by historians and novelists, famous as any garment tailor ever fashioned. Whether the story of his flinging it as a foot-cloth on the puddle that her Majesty hesitated to pass be false or true, it is certain that Raleigh's gallant bearing and thousand graces of mind and person speedily won him favor. Such a spirit, however, could not abandon itself wholly to the butterfly existence of the courtier. The prime of his life was as useful as splendid. To-day deep in chemical experiments or Rabbinical literature, the morrow perhaps saw him weighing anchor for that New World by which he was fascinated as by a magician's spell. Discoverer of Virginia, and planter of our first American colony, he labored with sagacious earnestness to render his country the rival of Spain in searching for and civilizing unknown lands. Some street of Richmond,

CAPTAIN JAMES COOK.

Melbourne, or Sydney would be no inappropriate site for a statue of Sir Walter Raleigh.

Elizabeth dead, the golden fortunes of the great admiral turned to dross. Wealth, lands, the jewels that made each dress he wore worth a fortune, the places and dignities that a word from him disposed of, were exchanged for a false charge of treason and a narrow cell in the Tower. After twelve years passed under sentence of death came the unsuccessful voyage to Guiana. On Raleigh's return the old condemnation was revived, and, a scaffold being prepared in Palace Yard at Westminster, two blows from the executioner's axe ended, on October 29, 1618, the sorrows of this gallant spirit. No man ever died with more heroic dignity. On the scaffold he asked for the weapon that was to sever the thread of his life, and examined its edge. "This is a sharp medicine," said he composedly, "but it is a cure for all diseases." In his Bible he had left some lines, composed the night before his execution. They constitute the solemn farewell of a hero: —

"Even such is Time, that takes on trust
Our youth, our joys, our all we have;
And pays us but with age and dust,
Who, in the dark and silent grave,
When we have wandered all our ways,
Shuts up the story of our days;
But from this earth, this grave, this dust,
The Lord shall raise me up, I trust."

CAPTAIN JAMES COOK.

[BORN OCT. 27, 1728. KILLED FEB. 14, 1779.]

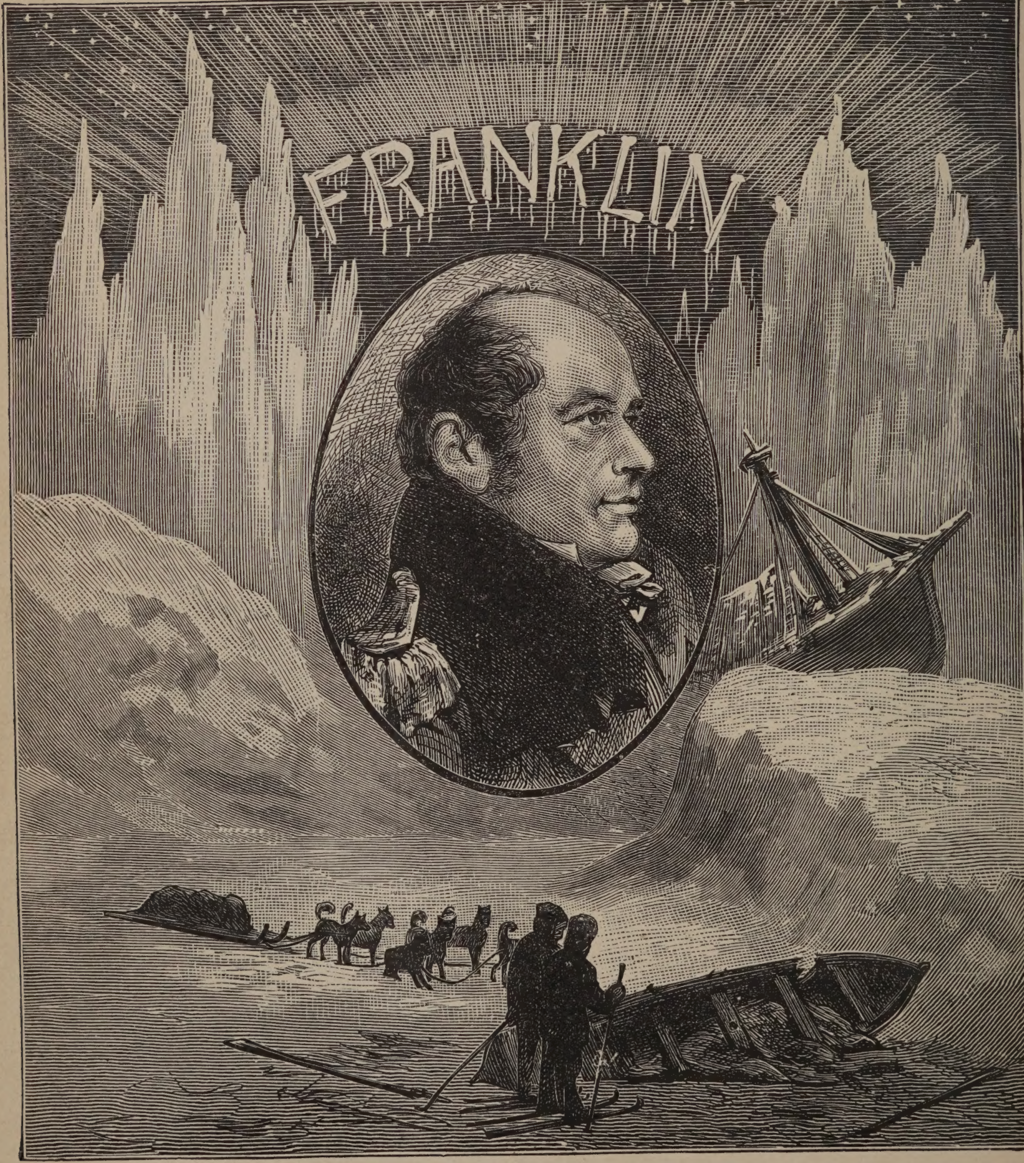
THE isles of Greece have been sung in burning words, but the poet is yet to arise who shall do justice to the isles of the Pacific. These long-hidden paradises, the creation of coral worms and the submarine infernos we name volcanoes, suggest to Europeans who visit them thoughts of Eden in the days that followed the Fall. Visions of tree and flower, resembling more nearly than any other of the scenes that make earth beautiful, the garden Adam sighed to leave, rise in tropical luxuriance before eyes that day after day have been wearied by the sight of monotonous leagues of water; and delighted voyagers, as they behold for the first time Fiji or Otaheite, lying lovely in the arms of Ocean, are prone to cry confidently that man must needs be innocent where all that surrounds him is so fair. A few days' experience of the supposed heaven on earth and the illusion is dispelled. The native races rank low even in the scale of heathenism. Drunkenness and those other curses that Europeans take with them to the savage tribes they visit are now rapidly sweeping them away. When a future Milton shall describe that Otaheitan Eden, to regain which the crew of the "Bounty" rose in mutiny, he must needs select Captain Cook or some other white man for his hero. In the Otaheitan himself the epic poet would find nothing remarkable except his vices.

James Cook, cabin-boy and post-captain, who, born in a clay-built hovel, of parents that never called a foot of the land they tilled their own, added by right of discovery so many square leagues of territory to the British Empire, would be no mean subject to exercise the pen of a modern Virgil. The hero who fled from burning Troy may have rivalled the hero who fell at Owhyhee in hair-breadth escapes; but so far as extent of travel and variety of adventure are concerned Cook asserts an immeasurable superiority. Only in the cradle and the grave did he ever know much of rest; and even his childhood gave promise of the activity by which his maturer years were marked. The spectacled dame who, with her birch beside her, taught him the alphabet and little beyond, the hard-working father and mother who placed him in charge of that dame, and a few years later apprenticed him to a haberdasher as the best means by which they could render his social condition a trifle superior to their own, found him, so far as we can learn, a troublesome lad to deal with. When little James, weary of the counter and fretted into restlessness by the neighborhood of the ever-restless ocean, insisted on being released from the haberdashery business and reapprenticed to two Quaker brothers, the owners of a few small collier vessels, Mrs. Cook, it is probable, wept as mothers who fear a watery grave for their darlings are accustomed to weep. Those good peasant parents, poor, ignorant, and loving, who had fondly and proudly hoped that their boy would one day sell stockings and yards of tape behind a counter of his own, are henceforth unheard of in connection with their famous son. Did they die while the ungracious slowness with which the world recognizes merit was still deferring the hopes and making sick the heart of the future discoverer? Did they live to see him a post-captain and Fellow of the Royal Society, and the nine days' idol of the London world? Biography, so far as the writer has examined it, is silent on the subject.

At twenty-seven Cook had so far risen in the world as to be mate of a collier brig, and saw small prospect of rising higher. While the vessel lay in the Thames there broke out that war with France which ended in the conquest of Canada. Cook, ill pleased with his condition, and conscious that it would be difficult to escape the clutches of the press-gang, avoided a forced enlistment by volunteering. By ability, energy, and sobriety he attracted the notice of Captain, afterwards Admiral Palliser, who thought him fitted for better things than a life before the mast. A master's warrant was procured, and in the Canadian expedition that bore with it the fortunes of Quebec and General Wolfe the eminent skill and daring of the promoted seaman were brought thoroughly to light.

Ten years later the "Endeavor," a small vessel belonging to the English navy, carried to the South Seas a party of astronomers and naturalists. Cook, whose talents had at length won some slender recognition, was charged with the conduct of the expedition and the care of the men of science. His difficulties were as great as ever seaman triumphed over. The unknown portions of the Pacific were the deserts in which the great navigator wandered. At sea his pathway was strewed with hidden rocks; if he landed, tribes of hostile savages instantly beset him. At one time disturbing New Zealanders in their cannibal repast, at another witnessing the hills of Australia enveloped in a conflagration his landing had induced the natives to kindle, Cook finally turned the prow of his vessel homewards, and fled, veritably chased by Death. The scurvy had broken out on board; and in a few weeks the "Endeavor" was converted into a floating hospital, from which corpses were almost daily cast into the waves. His second voyage saw the now famous discoverer profit by the experience so terribly gained. To preserve the health of his crew was the task he felt incumbent upon him; and by outstripping all the other seamen of his time in sanitary science he succeeded in his desire. Cook was now in Antarctic waters. English geographers of a century back fancied that a vast continent lay somewhere in the neighborhood of the South Pole, — a continent that it would be to the glory of their nation to discover. Charged with this impossible mission, James Cook struggled gallantly south. Through storm and darkness, ice islands ever around them, the furious wind from time to time driving one frozen monster against another, and causing them to split in pieces with the noise as of thunder, he and his one colleague forced forward their vessels, the "Resolution" and "Adventure." At length the "Adventure" lost her consort, and retreated northwards. Cook, though more than once beaten back to more hospitable regions, would hear of no final retreat till his errand had been fulfilled; and the "Resolution," faithful to her name, sought England only when the dream of a vast southern continent had been utterly dispelled. Land, said Cook, might indeed lie locked in that Antarctic darkness, but it was land on which the foot of man would never tread.

A third voyage was rendered mournfully memorable by the tragedy of his death. Returning from an attempt to penetrate, by way of Behring Strait, the regions where, sixty years later, Sir John Franklin and his companions perished, Cook discovered, on November 30, 1778, the fatal island of Owhyhee. By February of the following year the dissimulation of the natives had so effectually won upon him that he trusted himself



SIR JOHN FRANKLIN.

almost defenceless in their hands. His slaughter speedily followed. Assailed on the beach by a crowd of treacherous savages, he was beaten down when but a few paces from his boat, and not even his remains ever reached England. If he has not a grave in his native land, his memory still lives there. To few better beacons can English seamen look than to a man whose career was ever upward and onward, and whose devotion to duty ended only with his life.

SIR JOHN FRANKLIN.

[BORN 1786. DIED 1847.]

FROM time to time the doors of Arctic prison-houses unlock before the influences of an unusually genial season, and there drift down into warmer latitudes grim relics of tragedies wrought amidst the ice. Sometimes the battered fragments of a wreck that ice-floes have caught and crushed pass from these dismal regions into the open sea. Sometimes an entire vessel is loosed from its frozen anchorage, and returns towards the land it quitted long years before, bearing with it, perhaps, a load of corpses, to testify that its crew have voyaged onwards into eternity. No mildness of the Arctic summer dawned to release the imprisoned ships that carried to their doom the crews of Franklin and Crozier. The ice, having closed upon them, held them fast; and the unhappy voyagers, conscious of their peril, but undaunted by it, could but turn away into the wilderness, to mark each stage of their journey with a grave, and to find in those dim and untrodden wastes where the darkness of Arctic winter is broken only by the weird glitter of the northern lights, that bourn whence no traveller returns. Only the mournful letters of the dead, and yet more mournful relics of their sufferings and fate, have from time to time been discovered and brought back, in order to keep forever fresh in the hearts of all Christian people a sorrowful remembrance of heroes who died we know not so much as how or where.

As brave a heart as ever triumphed over danger beat in the breast of Franklin. When McClure, after wintering for three years among the ice, discovering a Northwest Passage, and pushing forward his ship into regions that no vessel had before entered, was forced to return, leaving the problem of the fate of Franklin still unsolved, Sir Edward Parry, himself among the most famous and persevering of Arctic navigators, thus spoke of his lost rival in Polar research: "Those who knew Franklin knew this, that he would push on year after year so long as his provisions lasted. Nothing could stop him. He was not the man to look back if he believed the thing was still possible. He may have got beyond the reach of our searching-parties." The last words were prophetic, though not in the sense that Parry spoke them. Franklin had indeed got far beyond the reach of any searching-party his country could send forth, and the mortal remains of a hero whose tomb would have honored Westminster had long years before been laid by the companions of his sufferings in an icy grave.

He was among the most ardent of the seamen who have cherished the ambition of discovering the Northwest Passage, or battling onwards to the Pole, and who, like Sir Martin Frobisher, have considered such achievements the only things on earth "left yet undone whereby a notable mind might be made famous and fortunate." Twice by land and as many times by sea did he attempt the enterprise in pursuit of which he at last laid down his life. From his first voyage he and his colleague, Captain Buchan, returned with vessels that the ice had crushed till it seemed a miracle that they could float. The second of the entrances of Franklin into Arctic solitudes was effected by land. The sufferings of the travellers were intense. After feeding on singed hides and lichens gathered from the rocks, they were reduced at length to collect bones that the wolves had picked clean and make the wretched refuse into soup. A morsel of flesh, however putrid, was esteemed a luxury; and when by rare good fortune a bird had been shot, the starving wanderers were but too happy to eat it raw. Leaving several of the party in the wilderness, slain by starvation and frost, the feeble skeletons that were left succeeded finally in reaching an encampment of friendly Indians, and for the first time in months were supplied with something deserving the name of food. Even their shoes and the covers of their guns had been devoured in their extreme want.

The living death he had endured daunted Franklin not a whit. In 1825, he and the remnant of his fellow-sufferers, with one or two new companions in danger, once more struck northward from the Hudson's Bay Territory towards the Polar Sea. When the expedition left England the wife of Captain Franklin lay at the point of death. The magnets of both duty and inclination drew him northwards; affection conjured him to remain. Not only did she to whom the conflict in his mind was owing refrain from bidding him stay, but she entreated him, "as he valued her peace and his own glory," to quit England on the day appointed, nor to delay an instant on her account. She gave him, as her parting gift, a silk flag, saying that it was to be hoisted only when he reached the Polar Sea. When it was reared on the shores of Garry Island, and the cold winds of the Arctic regions first shook it out from the staff, a deeper coldness had long since numbed the hands that fashioned it.

Knighted in 1829 for his eminent services as an explorer, Franklin had married again the previous year, and was a second time happy in his wedded life. In May, 1845, he sailed from Sheerness on his last and fatal voyage. The expedition consisted of two ships, the "Erebus" and "Terror." Men and officers were in high spirits, regarding the success of the voyage as all but certain, and their commander as the man of all men likeliest to achieve it. The vessels passed northward, were met by a whaler at the entrance to the Arctic seas, and then disappeared forever. When two years were gone by without any tidings of Sir John, the Government began to fit out expeditions in search of the lost adventurers. Some by way of the dangerous seas that lie between America and Greenland, some by way of Behring Strait, parties of explorers toiled forward in quest of their endangered countrymen. The "Erebus" and "Terror," however, seemed to have vanished utterly. When McClure, from whose bold dash into unexplored regions much had been expected, returned unsuccessful, hope began to die away. A year or two afterwards Dr. Rae brought back from his overland search news that made the fate of the missing Englishmen too plain. He had met Esquimaux in whose possession were relics of the expedition. From their narrative it appeared that the ships had been abandoned, that many of the party were dead, and that the survivors, reduced to the last horrible expedient by which hunger seeks to prolong life, had wandered on through the Arctic desert, perishing one by one.

While upon this subject, it would be unjust not to mention the efforts made by noble men of other countries to rescue the intrepid explorer. They illustrate that wondrous touch of nature that makes the whole world kin. In 1849 Henry Grinnell, a noble and philanthropic merchant of New York, fitted out at his own expense the two vessels, the "Advance" and the "Rescue," which under the command of Lieutenant De Haven, U. S. N., sailed in the following May for the Arctic Ocean. Upon the return of this expedition from a fifteen months' unsuccessful search, a second was immediately organized to continue it; and Dr. E. K. Kane, who had accompanied De Haven as surgeon, was selected for the command. This expedition sailed in May, 1853. It also failed to recover any traces of the lost Sir John; but the record of heroic endurances and of the sufferings that Kane's party were forced to undergo while imprisoned in the ice excited the world's admiration and sympathy, useless though the sacrifice of the lives of some and the health of others proved to be.

The British Government had declined to fit out further expeditions. The noble devotion of Lady Franklin, however, was still unsatisfied. Through her means a small vessel, the "Fox," went forth in 1857 under the command of McClintock. The voyage was destined to a mournful success. On the northwest shore of King William Land were found the grave of Franklin, and records showing that after his death the officers and men who yet remained had sought to gain the American continent by way of the Great Fish River. The only shore they were destined to reach was that which lies beyond the last river man can pass.

Franklin, as the documentary relics of the expedition proved, lived long enough to discover that of which he went in search. He, first of all men, lighted on a Northwest Passage. It was too ice-choked to be available, — a barren discovery, of which commerce could make no use. Not so barren are the lessons of his life, that record of steady heroism, of privations unflinchingly endured, of devotion to duty, faithful even in prospect of an icy grave.

The following anonymous poetical gem is deemed a fitting pendant to our sketch: —

"'Away! away!' cried the stout Sir John,
'While the blossoms are on the trees;
For the summer is short, and the time speeds on,
As we sail for the Northern Seas.
Ho, gallant Crozier, and brave Fitzjames!
We will startle the world, I trow,
When we find a way through the Northern seas,
That never was found till now!
For a good stout ship is the "Erebus,"
As ever unfurled a sail;
And the "Terror" will match with as brave a one
As ever outrode a gale.'

. . . . .

"So they bade farewell to their happy homes,
To the hills and valleys green;
With three hearty cheers for their native isle,
And three for the English Queen.

"They sped them away, beyond cape and bay,
Where the day and night are one;
Where the hissing light in the heavens grew bright,
And flamed like a midnight sun.
There was nought below, save the fields of snow
That stretched to the icy Pole;
And the Esquimau, in his strange canoe,
Was the only living soul.

"Along the coast, like a giant host,
The glittering icebergs formed;
They met on the main, like a battle plain,
And crashed with a fearful sound.
The seal and the bear, with a curious stare,
Looked down from their frozen heights;
And the stars in the skies, with their great wild eyes,
Peered out from the Northern lights.

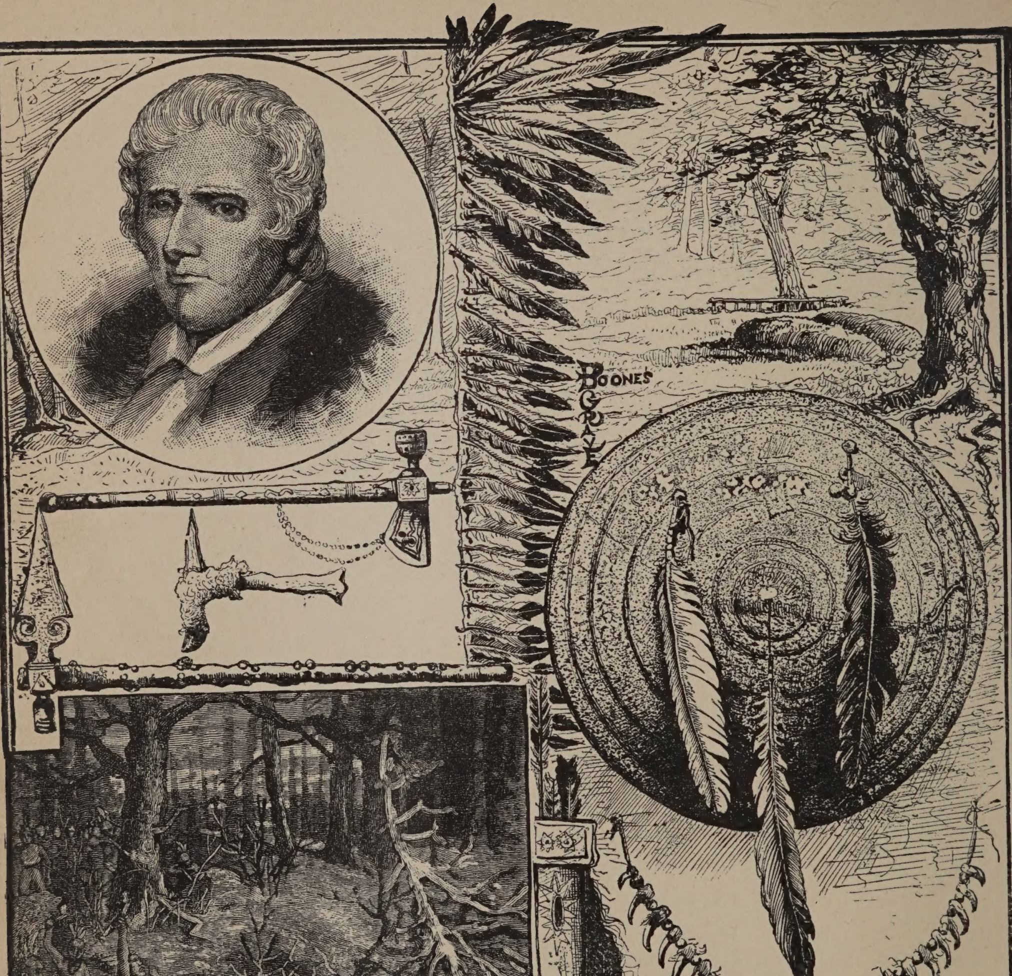
"The gallant Crozier, and the brave Fitzjames,
And even the stout Sir John,
Felt a doubt, like a chill, through their warm heart thrill,
As they urged the good ship on.

"They sped them away, beyond cape and bay,
Where even the tear-drops freeze;
But no way was found, by strait or sound,
To sail through the Northern seas.
They sped them away, beyond cape and bay;
They sought, but they sought in vain;
For no way was found, through the ice around,
To return to their homes again!

"Then the wild waves rose, and the waters froze,
Till they closed like a prison wall;
And the icebergs stood in the sullen flood
Like their jailers, grim and tall.

"O God! O God! it was hard to die
In that prison house of ice;
For what was fame, or a mighty name,
When life was the fearful price!
The gallant Crozier, and brave Fitzjames,
And even the stout Sir John,
Had a secret dread, and their hopes all fled,
As the weeks and months passed on.

"Then the Ice King came, with his eyes of flame,
And gazed on the fated crew;
With chilling breath, as cold as death,
He pierced their warm hearts through.
A heavy sleep, that was dark and deep,
Came over their weary eyes;
And they dreamed strange dreams, of the hills and streams,
And the blue of their native skies.



DANIEL BOONE.

"The Christmas chimes of the good old times
Were heard in each dying ear;
With the dancing feet, and the voices sweet,
Of their wives and their children dear.
But they faded away, away, away,
Like the sound on some distant shore;
While deeper and deeper grew the sleep,
Till they slept to wake no more.

"Oh! the sailor's wife and the sailor's child,
They will weep and watch and pray;
And the Lady Jane, she will weep in vain,
As the long years pass away.
But the gallant Crozier, and brave Fitzjames,
And the good Sir John have found
An open way to a quiet bay,
And a Port where we all are bound.

"Let the wild waves roar on the frozen shore
That circles the icy Pole;
For there is no sleep, no grave so deep,
That can hold a human soul!"

DANIEL BOONE.

[Born 1735. Died 1820.]

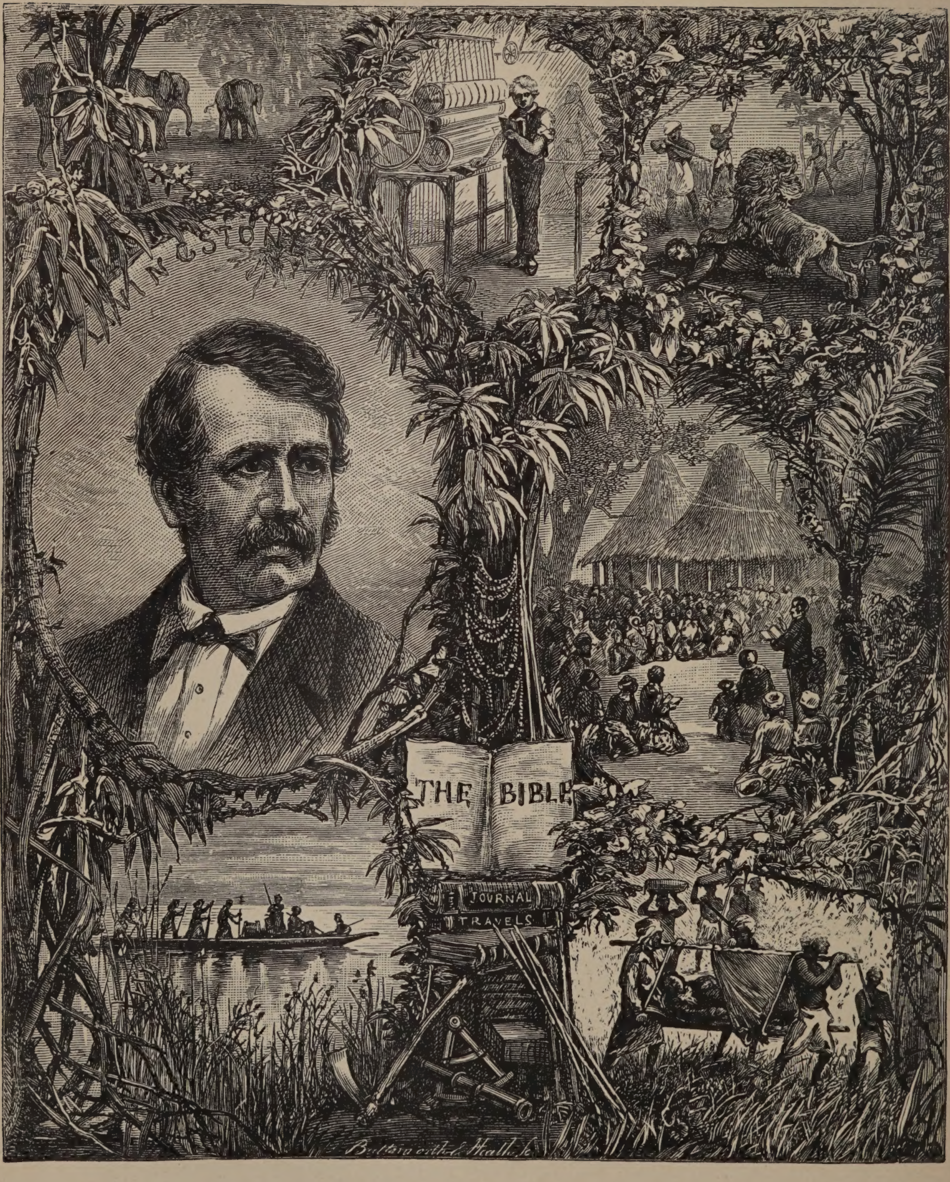
THIS greatest of American pioneers, who with his rifle, his axe, and his native strength of character and purpose, reclaimed so vast a portion of the national domain to civilization, was a native of Pennsylvania. When he was only eighteen his parents removed into North Carolina, where young Boone readily fell in with the wild and free life, half savage, half civilized, of a hunter, explorer, and scout, — a character and a career peculiar to American civilization and distinguishing it by a unique type.

All the country west of the Alleghanies was then an untamed wilderness, the French alone having a few scattered trading-posts along the course of the Ohio. Boone's thoughts, as well as his ambitions, were presently turned in this direction; for already the impulse to separate himself from a crowding population was too strong to be resisted. He had married in North Carolina Rebecca Bryan, who proved the worthy consort of such a husband. In 1769 he with four companions set out upon a prospecting tour into the heart of this remote wilderness, whose great natural beauty and fertility he knew only through report. He was thirty-four when he shouldered his rifle for this long, difficult, and dangerous march. His party crossed the mountains, entered Kentucky at the southeast corner, and reached Red River in June. Here from a rocky height they looked down upon an enchanting scene of far-stretching vale and noble stream, and here they resolved to pitch their first camp. The Indians having discovered the presence of the white men, Boone and one of his companions named Stuart were surprised while they were absent on a hunting expedition, whereupon the others, breaking up their camp in haste, made their way back to Carolina. Boone and Stuart having fortunately eluded the vigilance of their captors, these two intrepid spirits, undismayed by the flight of their comrades, determined to hold their ground, notwithstanding all the dangers that surrounded them. It was now the depth of winter. They had invaded the hunting-grounds of the fierce tribes inhabiting the country north of the Ohio, from whom no quarter could be expected, and their ammunition began to fail. Stuart was soon killed and scalped by the Indians; but Boone being unexpectedly joined by his brother, who had followed him from Carolina, these two Crusoes passed the winter in the Kentucky wilderness unmolested. When spring came, Daniel's brother undertook alone the long and dangerous journey back to the white settlements, while the pioneer himself, a stranger to fear, awaited his brother's return with no other companions than the bears and panthers that prowled around his solitary cabin. At this time Boone possessed a will of iron. To hold what he had come so far to seek was with him a point of honor; yet such a resolve provokes a smile when we think of it. Its very dangers seem to have charmed this bold spirit. To him the woods were a far more congenial dwelling-place than the haunts of men, the chase and its dangers more alluring than all the pursuits of civilized life. To such a man the dark and savage country he was in was an Eden, and he had decided thenceforth to make it his home in spite of the implacable hostility of its savage owners. It was two years before Boone returned to his family, in order to carry out his cherished design of bringing them to the paradise he had found. In 1773, being joined by several other families, he again set out for Kentucky; but after passing the mountains his party was attacked in a mountain defile, dispersed, and driven back by the Indians with the loss of six men. In the combat Boone's eldest son had fallen. But Boone was not the man to be daunted by reverses. From this time until 1775 he was actively furthering plans for the settlement of Kentucky. At one time he was leading a party of surveyors as far as the falls of the Ohio (Louisville); at another time he was helping to negotiate a treaty with the powerful and warlike Cherokees, or again assisting to mark out a road from the Holston to the Kentucky River in order to facilitate the passage of emigrants. So determined were the Indians living north of the Ohio to resist this invasion of their hunting-grounds, that after a bloody combat with them, foreseeing that the settlers must fight for every inch of ground, Boone built a block-house into which he subsequently removed his family. This was the first white habitation in Kentucky, and Boone's wife and daughters were the first white women who had stood on the banks of the Kentucky River. This primitive block-house was erected on the present site of Boonesborough. Soon other forts — or stations, as they were called — were built at different points, convenient to each other, inaugurating a warfare of the most desperate and sanguinary nature with the savages, — a warfare which gave to the region its significant title of the "Dark and Bloody Ground." The settlers fought with determined obstinacy and valor. On both sides blood flowed like water. Repeated conflicts at length taught these savages the superiority of the dreaded "Long-Knives." The record of these early days in the history of Kentucky is filled with deeds of daring, in which Boone always bore a conspicuous part. As was natural, the Indians put forth every effort to destroy so formidable an adversary; but Boone's skill, courage, and good fortune, his knowledge of all the artifices of his enemies, always extricated him from perils that would have staggered any man but himself. Unceasing vigilance was necessary to guard against surprise. Sometimes the Indians would assault all the garrisons simultaneously, and hold their defenders closely besieged for weeks together. Sometimes they would prowl unseen around the stations, watching their opportunity to take prisoners. During one of these affairs Boone's daughter was taken and carried off in sight of the garrison. Hastily collecting eighteen men, the father put himself at their head. In two days he overtook the marauders, suddenly fell upon them, put them to rout, and rescued his own child, together with other prisoners, who had also fallen into the hands of this particular band. On one occasion the wary backwoodsman was himself taken, while making salt at the Blue Licks for the use of the garrison. His captors first carried him in triumph to Detroit, and then back to their own chief town of Chillicothe, where they formally adopted him into the tribe as one of themselves. He was, nevertheless, closely watched. While submitting to this mark of distinction with apparent cheerfulness, Boone was constantly meditating an escape. He saved a little powder, and by splitting in two the bullets that were given him to hunt with, but always counted when he returned from the chase, he secured the means of subsisting in the woods. And when, at length, he learned that the Indians were again getting ready to invade Kentucky, and to strike his own settlement at Boonesborough first of all, in more formidable force than they had ever before assembled, he fled. In four days he reached the fort, having travelled one hundred and sixty miles without taking rest or tasting food but once on the way. This remarkable exploit proved Boone to be possessed of more than an Indian's fortitude and powers of endurance. He announced their danger to the settlers. The garrison was hurriedly put in the best state of defence possible, every man, woman, and child doing his or her utmost to this end. Early in August, 1778, the enemy appeared before the station, with four hundred and fifty warriors led by French officers. Boone had only fifty fighting men. He was summoned to surrender. His answer was characteristic. He would fight as long as one man was alive to defend the fort. The enemy then opened fire. For twelve days the little garrison resisted every assault. The intrepid Kentucky women loaded the rifles, run bullets, and nursed the wounded. Boone's daughter was wounded by her father's side. At the end of this time the besiegers retreated, with the loss of thirty-seven killed to the garrison's two. In his account of the siege Boone says, with grim humor: "We picked up one hundred and twenty-five pounds of bullets, besides what stuck in the logs of our fort, which is certainly a great proof of the enemy's industry." Boone took part in the memorable battle with the savages at the Blue Licks, where the Kentuckians met with the most disastrous defeat that they had ever sustained, losing sixty of the very flower of their little army. Boone's second son was among the slain, and the pioneer himself narrowly escaped death. Nothing but the heroism of a few men like Boone saved Kentucky at this time. The pioneer afterwards accompanied General Clarke in his expedition into the heart of the enemy's country, at which time the principal Indian strongholds in Ohio, from which the savage hordes had periodically poured down into Kentucky, were laid waste.

When at last peace with Great Britain had brought this sanguinary struggle to a close, Boone led an uneventful life until 1794, when, in consequence of some defect in his title, he was dispossessed of all the lands he had acquired in Kentucky, it might be said by right of conquest. Cut to the quick at receiving such treatment, Boone shouldered his rifle, and, turning his back upon Kentucky, he, like another Belisarius, took his solitary way still farther toward the setting sun. He crossed the Ohio and the Mississippi, or "Great Water," into the unexplored region watered by the Missouri. Even here

Boone's fame had preceded him. The Spanish governor of the province allotted him ten thousand acres on the Missouri, and created him Syndic of the District of St. Charles. This grant he also lost, upon the acquisition of Louisiana by the United States, because of his neglect to comply with the forms requisite to complete his title. In his old age Boone was now compelled to appeal to the justice of the people of Kentucky, in order, as he most pathetically said, to secure a resting-place wherein to lay his bones; for he could not now claim the ownership of a single acre. The response to the venerable pioneer's appeal was, however, as prompt as it was generous. Boone's claims being brought before Congress by the State of Kentucky secured from that body the confirmation of a thousand arpents of land in the District of St. Charles, where Boone had settled when he first went to the Missouri Valley.

An eventful life was nearing its close. In 1813 Mrs. Boone died. For more than half a century, throughout all the extraordinary vicissitudes of her husband's career, she had been the faithful and heroic wife and mother. Boone buried her on a bluff that overlooks the turbid Missouri. He himself died in 1820 in his eighty-sixth year. His memory is perpetuated in the names of towns and counties throughout the section in which his active life was passed. All honor, then, to the name of Daniel Boone! Though not in any sense great, he was one of those men who seem appointed by nature to do a certain work which is great in its results. As regards Kentucky he might have used the celebrated saying of Louis XIV., "I am the State," since the early history of Kentucky is his own biography. His log cabin was the foundation, not only of that Commonwealth, but, through the subjugation of the Indians, of the English settlements in Ohio, Indiana, Illinois, and Missouri also. Boone was a pioneer, not a statesman. His nature was too simple and upright for the struggles and rivalries of what we call "the world." Nevertheless, there is a moral grandeur in a character like this, whose stern virtues stand forth undimmed by the record of a single base action. To this character we continue to pay homage.



DAVID LIVINGSTONE.

DAVID LIVINGSTONE.

[BORN 1815. DIED MAY 1, 1873.]

FUNERAL anthems sometimes bear an exulting resemblance to songs of triumph; and never was the likeness more marked than when, on April 18, 1874, Westminster Abbey received the dust of Livingstone. The glory of the dead hero was pure. His scutcheon could be held up fearlessly in the face of the world; the most malignant scrutiny would fail to discover a blot on that stainless surface. He had fought no battles but those of religion and civilization, had spilt no blood, and had dried tears in place of causing them. His was not one of the lurid spirits that, laden with inward fire, lower on us like human thunderclouds, and from time to time startle the world as with lightning flashes. The career of Livingstone shines with a steady, splendid light. "Jesus, my King, my life, my all," wrote the great explorer as, a few days after his parting with Stanley, he, on the last birthday save one that earth had to offer him, renewed the vow of his youth: "I again dedicate my whole self to Thee." Well did his life bear out the spirit of the pledge, — so well that, were there space for generous emotions in the grave, the most princely coffin resting beneath the pavement of the Abbey would have been proud to welcome that of the Scottish traveller to a place beside it.

The dead might be silent, but not so the voice of England. She honored Livingstone gone from her, as she would have welcomed him in life. Never again would the strong Scottish face, resolution and sagacity written legibly in all its lines, show on any London street those features burnt brown by the sun of Africa. The keen eye had looked its last on negro hut or Scottish homestead. But the fame of the traveller remained, and the works of the missionary lived after him. He had cast the light of Christianity on the darkest places of the earth.

The almost feminine tenderness inseparable from all courage that truly deserves the epithet "lion-like" was peculiarly marked in Livingstone. That tenderness never found vent in misplaced sentimentality or effusive pathos. The feeling was too strong for it to lead the hero whom it influenced into any weakness. David Livingstone, believing in hearty effort, disdained ineffective words. His great heart might be set on fire by the wrongs of Africa; but he was not one to wring his hands helplessly in prospect of those wrongs, or, seizing on pen and ink, to wail forth page after page of useless lamentation. It did not content him to drop tears on the fetters of the negro; his desire was to break them. Noble actions, not splendid sentiments, were the contributions he made to progress. By tireless self-sacrifice, by a justice that mercy effectually tempered, by a patience whose very calmness bespoke its depth, and a perseverance none the less strong that it was gentle, did the famous explorer prove how truly in his nature the lion had lain down with the lamb. "I like you," was Cazembe's greeting to the Doctor, when the savage potentate in question had scanned for a moment the features of the white visitor to his dominions. "I like you," few women and children can have failed to think that ever looked on the face of David Livingstone.

How well we all seem to know him! How beloved is his memory in his native Scotland, that country whose pride in her great sons is surely equalled by no other nation on earth! A wanderer, both from disposition and circumstances, the Scot yet seems, when he sets out on his wanderings, to leave his heart in the land of his nativity. Is there in any autobiography ever written a passage more affecting than that which occurs in Livingstone's diary of June 25, 1868? The explorer had not seen an English face for years. He was worn with illness and privation, sick at heart from witnessing the sufferings of slaves, deprived of everything but his courage and his faith in God. All at once Death thrusts on him a token of his presence, and stirs up a thought that breaks like a sob from that noble heart. "We came," he writes, "to a grave in the forest. It was a little rounded mound, as if the occupant sat in it in the usual native way. . . . This is the sort of grave I should prefer; to lie in the still, still forest, and no hand ever disturb my bones. The graves at home always seemed to me miserable, especially those in the cold, damp clay. . . . But I have nothing to do but wait till He who is over all decides where I have to lay me down and die. Poor Mary lies on Shupanga brae, *and 'beeks fornent the sun.'*" In that kindly Lowland dialect, the dearer for its very ruggedness to the rugged Scottish heart, the simplest, tenderest tongue that ever told of love and sorrow, does the indomitable, worn man, gray now with a thousand labors and sorrows, write down his thought of his dead wife. "On Shupanga brae." So dear is everything connected with Scotland to this son a hemisphere distant from her, that the "brae," with its memories of yellow gorse and rivers like Tweed and Yarrow, becomes a term to express the African wilderness where, under the shade of a banyan-tree, was dug the grave of that beloved helpmeet. What tears must have blistered his eyes as he wrote of her! How vividly must her lost face have been present to his memory as he stood by that grave of the unknown negro in the "still forest"! He had loved her so truly. The only time grief ever broke the great traveller down was when she died.

At Ilala, five years later, Livingstone lay down in a hastily built hut, knowing that it was to die. Did the deep murmur of the neighboring forest recall to the suffering missionary in those last hours of agony sounds long unheard, but familiar to his boyhood, — the rushing of Clyde to the sea, the hum and whir of the factory where, at ten years of age, his early ardor for study led him to place an open book on some part of the machinery before him, that he might read even as he worked? He was dying now; and not on the banks of the Clyde, nor even near the Nile, — that more famous river on whose exploration his heart had so long been set, — but amidst jungle and noisome swamp, where scarcely so much as a drop of pure water could be obtained to wet his fevered lips. And presently there came a second and invisible guest to the thatched hut in the shadow of the trees. In the early morning of May 1, 1873, the faithful native servants of the explorer entered the rude structure where, as they supposed, he was lying sick. They saw their master kneeling in an attitude of prayer by his bedside, and instinctively drew back. Livingstone did not move. Presently one of them advanced softly to him, and touched his cheek. It had a deathly coldness; the flush of the fever burned there no longer. The hero was dead.

And so he died praying! Wrestling with God for Africa; beseeching that in the harvest-field where he had so earnestly labored other workers might not lack. There has been given him, — as the sole token by which, when his remains reached her, Britain could show that this was a man whom she delighted to honor, — a grave in Westminster Abbey. It was not the sepulchre he coveted. His body will rest there, however, as peacefully as though the African forest shrouded his grave in leafy gloom; and his name and his example will be forever bright in our remembrance. This was a man who gave so much fear to God that he had none left for earthly dangers. Not when snatched as by a miracle from the jaws of the lion whose spring had borne him to the ground with a shattered arm, not when, sick and almost starving, he tottered into Ujiji, to be found there by the gallant Stanley and relieved from his pressing wants, did the indomitable spirit for a moment blench. Strong in his courage, inflexible in his sense of duty, lofty and earnest in his aims, the character of Livingstone shines on us with an almost ideal light. He gave his life to silence, so far as might be in the power of a single man, — the awful *Miserere* that from the interior of the dark continent goes up ceaselessly to heaven. Africa is the legacy he has left us; the single homage his memory demands is that we shall render the negro civilized and free.

It would require a long chapter to do more than indicate in the most general terms what were the services that Livingstone rendered to his country, to the cause of religion and humanity, and to the extension of geographical knowledge. An entire reconstruction of the map of Africa was the result. Born at an obscure village of Lanarkshire, Scotland, and of humble parentage, the future explorer first went to work in a cotton mill. At twenty-three he had, by the most strenuous exertions, laid by enough to undertake a college course. In 1838 he went up to London, presented himself, and was accepted by the Missionary Society as a candidate. For two years longer he applied himself to the study of theology and to taking his medical degree. At the end of these two years, namely, in 1840, Livingstone sailed for Africa, the future scene of his labors.

Livingstone's first endeavor was to make himself acquainted with the country by pushing out into it in various directions. Already, no doubt, were his clear eyes fixed upon the vast extent of unknown territory represented on the map of Africa by a blank, and inhabited by an unknown people. A two years' examination of the ground satisfied Livingstone that the proper work for white missionaries was that of opening up new territory and of pushing forward new stations, leaving the native missionaries to work the field in detail. The whole of his subsequent career was a development of this idea. Livingstone was absent sixteen years, during which time he had penetrated first to Lake Ngami, which had never before been seen by a white man, and subsequently to the great falls of the Zambesi. A second journey of exploration, known as the Zambesi Expedition, and fitted out under the patronage of the Government, Livingstone being named its commander, discovered and explored Lake Nyassa on the east coast; but from various causes the expedition failed to accomplish as much as Livingstone had hoped for. Livingstone's last expedition, in 1866, was a determined effort to penetrate to the farthest sources of the Nile, the "fountains of Herodotus." How he persevered in the face of determined opposition from the slave-dealers, of sickness which reduced his iron frame to a "ruckle o' bones," of hardship to which other experiences seemed mere holiday excursions, are things freshly remembered. All tidings of him having been lost, the explorer was believed to have perished among the African jungles; but he was at length found by the rescuing party of Stanley at Ujiji in a deplorable condition. The arrival of the intrepid American explorer on the scene was the one bright episode of this brave but futile attempt to carry the light of civilization into the very heart of equatorial Africa. After the departure of Stanley, Livingstone once more set about the work to which he had dedicated his life. His life was to be the forfeit.

III.

PHILANTHROPY.

JOHN HOWARD.

JOHN HOWARD.

[Born 1726. Died 1790.]

THE only blemish that has ever been thought to stain the character of this eminent philanthropist was connected with his conduct to his son. It has been laid to his charge that he was not only a strict but a severe parent. That charge, however, has been thoroughly investigated and completely disproved. The youth fell into dissolute habits early in life; they were carefully concealed from the father, and being unchecked they brought on an illness which resulted in madness. He survived his father nine years, but remained to the end a hopeless lunatic. John Howard was an affectionate and kind-hearted parent as well as a single-minded benefactor of his race; and the vast improvement of the condition of prisons which this century has witnessed is in a great measure owing to his unwearied exertions. Though the son of a London tradesman, and himself apprenticed to a grocer, Howard found himself at nineteen years of age in possession of a handsome fortune, purchased the time remaining of his indenture, and made a tour in France and Italy. On his return he married his landlady, out of gratitude for her kindness in having nursed him through a severe illness, though she was twenty-seven years his senior. In three years she died, and, desiring to aid the sufferers from the earthquake in Lisbon, he embarked for that port. Captured by a French privateer, he was confined as a prisoner at Brest, and subsequently taken to the interior, whence he was permitted to return to England on condition of providing a suitable exchange. Having married again, he passed seven years of wedded life in continual acts of benevolence towards all around him. But his wife died after giving birth to a son, who eventually multiplied his father's sorrows. Bereaved of a beloved partner, and having sent his son to a distance for education, Howard was unable to bear the solitude and seclusion of his home at Cardington. When he had been nominated sheriff in 1773, the sight of so many miseries and abuses in the prisons of which he had charge, and the remembrance of all he had seen when confined abroad as a prisoner of war, led him to apply to the magistrates for some remedy of the most glaring evils. The reply which he received induced him to prosecute his inquiries further, and to set out on a tour of inspection. He visited the prisons of one county after another; and at last, after having seen most of the town and county jails of England, he accumulated a mass of information, and laid it, in March, 1774, before the House of Commons. From this date the reform of our prison system begins. Who can describe the depth of prison degradation at that time? Two hundred crimes were punishable with death, the cells noisome, the food of the coarsest, little straw, damp walls, narrow cells, bad water, sexes huddled together, stagnant mire, dunghills within the walls, brutal jailers, months of unjust imprisonment before trial, no regard to health or decency, and jail fever decimating the miserable inmates. At Ely the prisoners by night were caged down with iron bars, and had on iron collars full of spikes! But Howard had learned by suffering to pity sufferers; and his famous work "On the State of Prisons in England and Wales" caused mercy to rejoice against judgment in many places. When called to the bar of the House of Commons, he produced an overwhelming impression, and he carried the legislature with him in mitigating the dreadful evils which it was his mission to combat. And what were the remedial measures Howard proposed? Prevention of crime by education, productive prison labor, graduated punishments, encouraging industrious and well-conducted prisoners by discharge before the expiration of their term, moral and religious instruction, and, lastly, the law of kindness. Read Howard's Report on the State of Prisons and compare it with "Seven Years of Penal Servitude" (1878), and you will see what one century has effected through the persistent carrying out of this great philanthropist's remedial measures.

PHILIPPE PINEL.

There was scarcely a country in Europe that Howard left unvisited, and the results of his travels and labors were embodied in the appendices to his first report. Determined at the risk of his life to inspect the Lazaretto system, he would not allow a servant to accompany him because unwilling to expose him to so much danger. He returned to Smyrna from Constantinople while the plague raged there, for the very purpose of sailing from an infected port to Venice, and undergoing the rigors of the quarantine system. It was when on his way through the East to Russia, and before he had proceeded farther than the Crimea, that Howard was seized with a rapid illness, which he believed to be an infectious fever caught in prescribing for a lady. In January, 1790, this precious life was taken away from earth; but grateful nations will never forget the name of Howard. Every prison in Europe feels something of his benign influence at the present moment; and every prisoner has reason to bless his memory, for, however sad and lonely may be his lot, however severe the sufferings he has by his misconduct brought upon himself, that lot would have been more sad, those sufferings more severe, but for John Howard and his benevolent and untiring exertions.

So true it is, that, if the evil that men do lives after them, the good that is done by good men is to bear abundant fruitage "for all time."

PHILIPPE PINEL.

[Born 1745. Died 1826.]

IN the pages of that masterpiece of genius and of horror, the "Inferno" of Dante, we read how those lost to salvation were tortured by every species of torment the ingenuity of the spirit of evil was capable of devising. For many centuries those unhappy creatures who had wholly or partially lost their reason were subjected by their fellow-men to cruelties which it seems impossible to think that human nature could have been guilty of. It is still more dreadful to reflect how it was even commended as a just and Christian, as well as expedient, practice to confine the lunatic to a living inferno, even as the soul of the wicked was confined to an eternal one. In the ignorant superstition of the times the lunatic was literally believed "to be possessed of a devil," and therefore it was argued he should be treated as one belonging to the Devil. He was to be placed in chains and darkness, he was to be starved and beaten, and his recovery, if possible, was only to be effected by some miracle of cruelty as well as ingenuity. And yet, despite the growth of intelligence, such superstition and such revolting treatment was still in existence towards the close of the last century. But then came the French Revolution, which with all its attendant horrors, with all its cry of liberty, made the watchword for the committal of the greatest enormities, yet produced a liberty of thought and opinion which in many respects proved a blessing to the progress of humanity. The false teaching of infidelity was everywhere used as the excuse and in the advocacy of the basest immorality. Every theory and opinion having the barest aspect of originality was hailed as a sign of a regenerating intelligence, which was to produce a millennium of perfect happiness. In every science sprang up some prophet who foretold the blessings which would be showered on humanity if only his real or false doctrines were universally accepted and implicitly believed in. But it is just to own that all the prophets of the great Revolution were not false ones. Among those who were led away by the ardent zeal for progress and improvement was one whose labors in the cause of science and humanity could have never been too much overvalued. We have seen that Howard, now known as "the philanthropist," devoted a lifetime to the good work of ameliorating the wretched condition of prisoners and the conduct of prison management. Philippe Pinel gave up all his energy and talents to the reform of the existing treatment of the insane, and succeeded in banishing the old system of wicked and foolish cruelty by which those unhappy creatures had hitherto been treated.

In the beautiful country of the Tarn, in the old historic province of Languedoc, Philippe Pinel, on the 20th of April, 1745, first saw the light at the Château de Rascas of Saint-André. His father was a doctor of Saint-Paul, a man of some considerable intelligence. The young Pinel was first educated at the college of Lavaur, that town and parish which in the thirteenth century was the stronghold of the Albigenses. His father having determined on his following the medical profession, he was afterwards sent to Toulouse, where in 1773 he received his diploma. At Montpellier, at the famous school of medicine, he perfected his professional knowledge, and helped to increase his income and add to his position by giving lessons in mathematics. Still, like every Frenchman of intelligence and ambition, Philippe Pinel soon came to the conclusion that Paris alone was the proper field for his talents; and as he owned he could not live out of the great city, the year 1778 found him a resident in the French capital.

The young doctor did not wait long before he began to show his particular bent for one most important branch of his profession, and gave up the best part of his studies to investigating the existing authorities on the treatment of lunacy. Still better than all, Philippe Pinel speedily arrived at the conclusion that his own personal observations of cases of insanity might in the end prove more useful than merely following in the beaten track of, or slightly improving on, the systems of his predecessors and contemporaries. However, he first became generally known to the medical and scientific world by his translation from English of Dr. Culley's work, which was published in Paris under the title of "Traité de Médecine Pratique." At that time, wretchedly conducted as they were, the English lunatic asylums were considered to be the best of any in Europe. The German were supposed to be the worst, although, as they have always done on all subjects, the German physicians had indulged in many theories on the treatment of lunacy. With these pundits of the faculty Pinel had but little sympathy. Indeed, some of their modes of treatment seem to suggest that the pretended curers of lunacy were more in want of treatment for that unhappy complaint than even the patients submitted to their charge. One of their favorite theories was the wondrous power of sudden surprises. The patient was to be walked slowly over a floor, and then unexpectedly let through a trap-door into a well beneath. Another medical wiseacre "wished for machinery by which a patient just arrived at an asylum, and after being drawn with frightful dangers over a metal bridge across a moat, could be suddenly raised to the top of a tower and as suddenly lowered into a dark and subterranean cavern; and they owned that if they could be made to alight among snakes and serpents it would be still better."

Yet even the English doctors, who had such a strong faith in their own superiority, still vastly approved of the efficacy of torture in the cure of the insane. Dr. Darwin was the proud inventor of the hideous circular swing. Dr. Cox improved on the swing by suggesting the further advantage of its always being used in the dark; the room, dungeon, or cell being made pleasant for the wretched patient by the introduction of wild noises and horrible smells. The worthy Dr. Hallam further remarked of this instrument of torture, "that no well-regulated asylum should be without it." It was not until the question was before the House of Commons in the year 1815 that Bethlehem Hospital left off being a show-place for holiday-makers, the price of admission being only the moderate sum of *2d.*, so that all classes of the community might have it within their power to come and torment the lunatics at their pleasure, even as silly and cruel children nowadays try to irritate into fury the animals imprisoned behind the iron bars of a menagerie. As a rule, also, despite their theorizing, the mad doctors seldom troubled themselves by practising on their patients unless they were more than usually violent, or, on the other hand, from their extreme docility they thought they could be perfectly safe in approaching them. Their hands and feet were chained and manacled, a ragged blanket was placed over them as an apology to cover their nakedness, a heap of straw was strewn on the floor of their cells, and there, in darkness, dirt, loneliness, cold, and hunger, they were left to themselves. A deep-rooted idea prevailed everywhere as to a lunatic never being safe unless chained like a felon. But before his appointment to the hospital of Bicêtre in 1793 as *médecin-en-chef*, Pinel had determinedly argued in the salons of Paris and at meetings of the *savans* against the utter folly of this idea, which could only be considered respectable on account of its great age. In 1792 Couthon was persuaded by Pinel to visit the insane patients at Bicêtre. The good doctor asked the famous, or infamous, revolutionist to question the lunatics; but he shuddered and turned away at the bare thought of the danger he might incur by going near them. "Do what you please," said he to Pinel; "you will become their victim."

By such fears as these the doctor was but little affected. He held that by judicious treatment, by a mixture of kindness and firmness, by an untiring patience, and by never under any circumstances irritating a patient, even the lunatic supposed to be most dangerous might be allowed a great share of liberty. Yet so bigoted was the opposition to his idea of allowing any share of liberty to a lunatic, that he was actually attacked by a Paris mob, which had conceived the idea that the doctor intended to let the most dangerous lunatics loose upon the city. One of Pinel's first experiments, and which proved the perfect truth of his theory, was with an English captain, who for forty years had been chained and manacled in a cell of the Bicêtre. This man was acknowledged to be a most dangerous lunatic. His paroxysms of madness were most violent, and he had even killed one of his keepers with his manacles. Yet Pinel never for one moment doubted as to its being judicious to allow his chains to be taken off. Approaching the unhappy creature, he said to him, "Captain, I will order your chains to be taken off and give you liberty to walk in the court, if you will promise me to behave well and injure no one."

As might be imagined, the man was considerably surprised, and his answer was by no means unnatural.

"Yes, I promise you; but you are laughing at me. You are all too afraid to touch me."

"I have six persons ready to enforce my commands, if necessary," answered Pinel. "Believe me, then, on my word. I will give you your liberty if you will put on this strait-waistcoat."

The man readily submitted, and, his chains being removed, he was left to do as he pleased. For the first quarter of an hour, owing to the stiffness of his limbs from his long and close imprisonment, he could hardly rise from his seat. But at length he gained both strength and courage, and leaving his cell walked up the staircase, gazing at the sky, and uttering the expression, "How beautiful!"

For the rest of the day he walked about in evident enjoyment, and quite free from the least sign of approaching irritation. In the evening he returned of his own accord to rest, and, for the first time, a comfortable bed being prepared for him, he fell tranquilly to sleep.

A few days after this Pinel released fifty-three patients from their chains and cells. What was most remarkable, as showing the accuracy of his judgment and his sympathetic power of discovering the moral and physical condition of his patients, was that the violent lunatic whom he had first released, and who before that time was considered to be most dangerous, was of the greatest use to the institution in persuading his unhappy brethren in misfortune to so quietly conduct themselves as to gain the approval of the doctor, and so gain a further share of liberty.

In 1795, owing to the great success of his mode of treatment, Pinel was appointed to the Salpétrière; and, his fame being now spread throughout France and even beyond his own country, he was made *Professeur de Physique Médicale* at the Paris School of Medicine, and not long afterwards *Professeur de Pathologique Interne*. In 1803 he was awarded the honor of being elected a member of the Institute, and was made secretary-general of that learned body.

To enumerate the particular works of Pinel would be only to give a list of scientific names of little interest to the general reader. However, his "Nosographie" and his "Traité Medico-Philosophique sur l'Aliénation Mentale, ou la Manie," are now universally known throughout the whole of the medical world. The latter work was translated into English in 1802, and in the "Edinburgh Review" was received with more or less adverse criticism. It even received a heavy attack from the manager of Bethlehem Hospital; but, considering the way that famous institution was in those days conducted, Pinel might well have taken such abuse of his opinions as rather a compliment to his intelligence and humanity than as a conclusive proof of his folly or his ignorance.

As to the private life of Pinel, it was to the highest degree exemplary. Full of kindness, disinterested, generous, and living with the greatest simplicity, he yet possessed a firmness of character which at all times prevented him from yielding to the least temptation of evil. Charitable he was to all in want. Condorcet during the troublous times of the Revolution found a safe home in the house of Pinel. In demeanor the great physician was naturally modest, so much so that it was often mistaken for a nervous timidity. He was a man, too, above all ungentlemanly meanness, and would never at any time join in any of the cabals or intrigues of the college faculty. As would follow as a matter of course, his lectures in the Faculté de Paris were well attended. Still Philippe Pinel, like many men of shining talents joined with the soundest knowledge and experience, was far from being a great orator. In speaking he failed to possess an easy flow of words, and his speeches were frequently broken by awkward pauses. But what could not be easily followed in his set lectures could be readily gleaned from them when published in print. Yet the best way of all to learn the secrets of his system was to visit the asylums of the Bicêtre and Salpétrière. There but in a few short months could the medical student acquire a sound knowledge of his valuable precepts, and still more quickly learn the principles of his daily practice.

As to the position which Pinel holds in the ranks of fame, it is not nearly so exalted as it should be. He lived in an age when the slaughter of millions excited more attention than the salvation of thousands. The sounding names of Mirabeau, Robespierre, and Danton, of Napoleon, Ney, and his comrades, have helped somewhat to obscure that of Philippe Pinel. But he has a fame which we hope will for many centuries burn with a gentle and kindly light. His name will ever be a sweet sound to the ears of the feeling and humane. And in thinking of him we cannot but call to mind the lines of Shirley, —

> "Only the actions of the just
> Smell sweet and blossom in the dust."

ELIZABETH FRY.

[Born May 21, 1780. Died Oct. 12, 1845.]

AFTER having given a brief memoir of Howard, it is but natural that we should make an opportunity of noticing another and, if possible, still more devoted friend of the unfortunate and criminal classes, — the noble-minded and truly unselfish Elizabeth Fry.

"Woman's mission" is now a household word. It was Mrs. Fry's opinion that every woman has her individual vocation, and that in following it she fulfils her mission. She laid great stress on circumstances and position in life, and on personal abilities. So far from thinking, as is now too commonly and indiscriminately thought, that any woman might do as she did, if she would, she considered domestic duties to be the first and greatest earthly claims in the life of woman. Of course some allowance for peculiarities of opinion on minor points must be made in consideration of the tenets of the Society to which she belonged; but aside from these it was her unqualified conviction that there is a sphere of usefulness open to all. Ladies' work in general, such as visiting the sick and poor, looking after village schools, and assisting the work of benevolent

ELIZABETH FRY.

societies, she by no means overlooked. These matters all had her fullest appreciation. Still she felt there was something beyond. There was the hospital and the prison. There were multitudes of homeless and abandoned children. There were vast numbers of her own sex, sinking daily in degradation and guilt. Many who had been once in pure and happy homes, or who had occupied useful positions in business or domestic service, already, so far as this world was concerned, were sunk and ruined forevermore. She saw these poor creatures on a wide and downward road, with no hand outstretched to save them from their inevitable fate, or to assist them in helping themselves, when, as rarely happened, they were even willing to be reclaimed. Every variety and every grade of vice met her in the prisons which she visited, — those who sinned for want of thought, and those who revelled in their guilt and gloried in recklessness and impurity. Yet she did not despair. Her own life she freely devoted to what others thought a hopeless task, and she firmly believed that a mighty power might be wielded by her own sex to stem this torrent of vice, — a force that the gentle, the educated, the virtuous, might exert over the ignorant and criminal. The way in which this moral force was to be brought to bear she pointed out by walking in it herself, —

> "And in her duty prompt at every call
> *She* watched and wept, *she* prayed and wept for all.
> *She* tried each art, reproved each dull delay,
> Allured to brighter worlds, and led the way."

Elizabeth Gurney was the third daughter of John Gurney, Esq., a merchant of Norwich, where she was born. During her sixth year the family removed to Earlham Hall, formerly belonging to the Bacons, and in this home her unmarried life was spent. Both her parents were descended from distinguished Quaker families, — her father from the Gurneys, who were the associates of George Fox; her mother from the Scotch Barclays, the most noted of whom was Robert Barclay, the author of the famous apology for the Quakers. Hence very early in life she became the subject of deep religious impressions. She was gifted by nature with a good voice and a strong taste for music; but these, and the natural accompaniment of dancing, were of course discouraged by the religious circle in which she moved. When she was twelve years of age her mother died, and hence the defectiveness of her education and the waywardness and self-will of her character as a girl. Her quickness and originality, however, made ample amends for these defects, though, perhaps, not in her own opinion. What as a child had been a touch of obstinacy, became in the woman a noble firmness and finely tempered decision. Childish cunning ripened into a more than ordinary penetration into character. Her idleness as a girl was probably nothing but a disinclination to study or work in ordinary grooves; for as a woman her thoughtfulness betrayed a deep-rooted habit of thinking that must have been hers from a very early period.

At seventeen she had a taste of the gayeties of London life, — balls, theatres, and concerts. Her father gave her this opportunity freely; but it was not to her taste. Her mind was too serious for such vanities to give her any permanent or solid satisfaction.

To overcome her natural timidity she adopted a somewhat drastic remedy, — she accustomed herself to stay in the dark and to ramble away into lonely and unoccupied apartments in her father's mansion at Earlham. This was before she was twenty years of age.

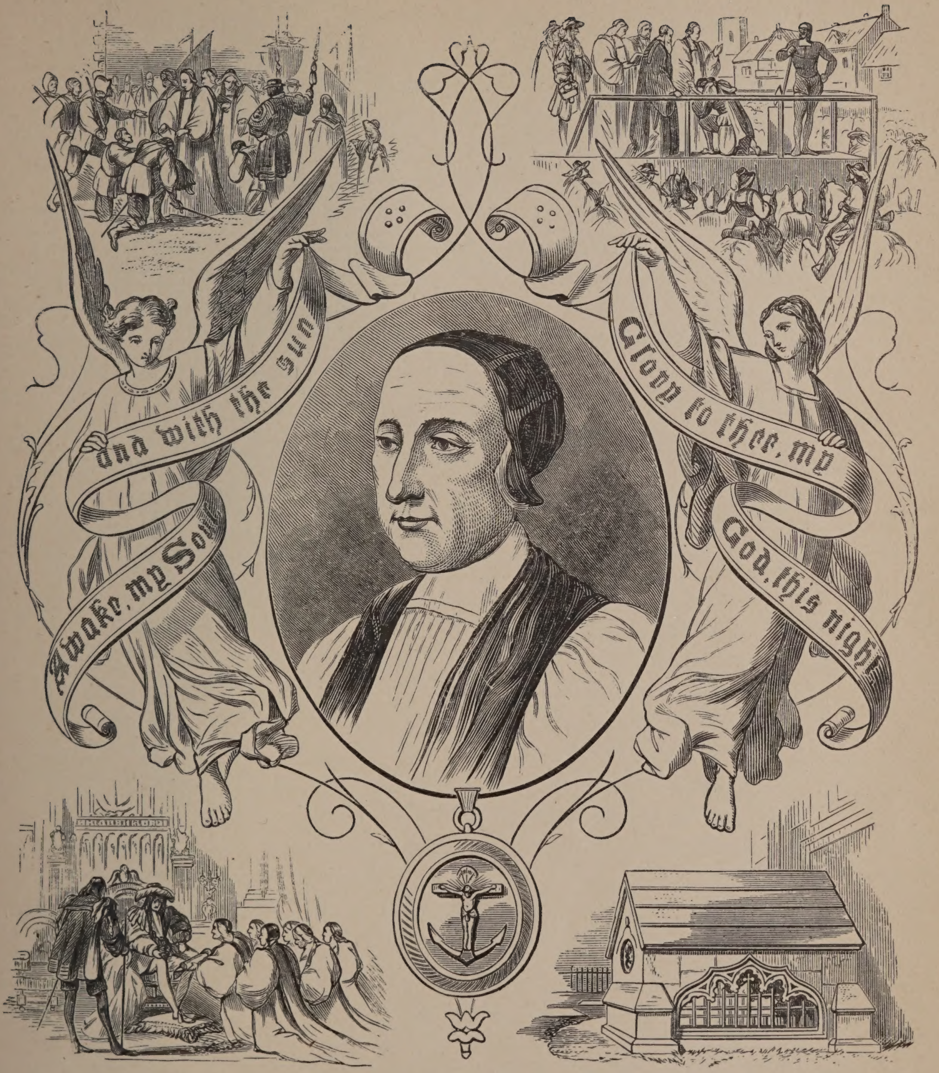
Her prison work began with her visit to Newgate in February, 1813, — thirteen years after her marriage to Mr. Joseph Fry. She was then the mother of eight children.

After her father's death, in 1809, she had become a regular minister in the Church to which she belonged. Thus she looked upon her mission to the unfortunate women in Newgate and elsewhere as part of her public duties. For thirty years she never missed an opportunity of carrying out this truly philanthropic object. In 1830 she extended her field of labor to foreign prisons. The following year she obtained an interview with the Princess Victoria, having a hope, as she relates in her diary, of influencing the future Queen of England on the important question of slavery. She thought the Princess "a sweet, lovely, and hopeful child." In 1840 she speaks of another interview, and a present for a "refuge" of £50 from the youthful Queen. Space fails us to record the thousandth part of her eventful and interesting life. Extended particulars from her own letters and diary may be met with in the excellent memoir by her daughters. How she won the fame which is so honorable to her memory; how she traversed the Continent, talking with all manner of pitiable people; how she made her way into the refuges and prisons of Holland and Germany, descending into the fetid air of the jail at Amsterdam, or threading the dismal corridors in the infamous dungeons of Magdeburg; with what untiring earnestness she argued, in eloquent fragments of French, with prison authorities at Potsdam and Berlin, or encountered the perils of the plague hospital at Paris; ventured into the unsavory precincts of Saint-Lazare, and talked with the aimless loungers of La Force; how still she journeyed to La Perrache and the Maison d'Arrêt at Lyons, from Lyons through Nismes to Marseilles, and penetrated even to the galleys of Toulon, but everywhere bent on the one great errand of mercy to the fallen; — all this must be passed over. Thirty years of such labors must and do tell upon the condition of the places which, like Howard, she endeavored to improve. To the influence of her work let us add the spirit which now pervades the upper ranks of society; and we shall see not only how great is the cause for thankfulness for the past, but how wide also is the ground for hopefulness in the years to come.

BISHOP KEN.

[Born 1637. Died 1710.]

ON the 30th of June, 1688, King James II. had been reviewing his troops, in number 16,000, on Hounslow Heath. The day was hot, and he had retired into Lord Feversham's tent, when an express arrived with news of great importance. The King was greatly disturbed on hearing it, and left directly for London. Hardly had he quitted the camp when a deafening shout was heard. It was the soldiers' extravagant expression of tumultuous joy; and the mortified sovereign learned from Feversham that they were shouting because the bishops were acquitted. "Do you call that nothing?" said James, and then repeated what he had said when the news of the acquittal first reached him: "So much the worse for them!" It was not clear for whom it was to be worse. Most of those around him seemed to think it would be better for everybody. Bonfires were being kindled, volleys of artillery fired, bells were pealing, and horsemen spurring along every road to carry over the country the joyful news. The seven bishops were regarded as confessors who had exposed their lives in defence of the rights of conscience, to vindicate the law and resist the craft and despotism of the Crown. The Declaration of Indulgence, for refusing to publish which in their dioceses they had been tried, superseded the law by royal decree, overthrew the British Constitution, carried the dispensing power to an intolerable length, and, under pretence of religious toleration, went far towards forcing on the English people a religion to which they were intensely averse. The defence of the national liberty was for the time intrusted, by an extraordinary combination of circumstances, not to generals or statesmen, but to seven men whose only weapons were their pastoral staves. If they had failed in



BISHOP KEN.

courage and resolution, their clergy would have felt themselves abandoned, and the encroachments of the Stuart monarch would have passed all bounds. If they — with Bishop Ken, be it remembered, among them — had quailed before their duty in the meeting at Lambeth on May 18, 1688, they would not, under the presidency of Archbishop Sancroft, have drawn up the petition to the King in which they maintained that the Declaration of Indulgence, which they were unable in conscience to order to be read in churches, was "founded on such a dispensing power as had been often declared illegal in Parliament, and particularly in the years 1662 and 1672 and in the beginning of his Majesty's reign."

If we are calling Bishop Ken to our readers' affectionate remembrance to-day, it is because his name is affixed to this document, which proved in its results the cause of England's deliverance from the peril of her liberty, ecclesiastical and civil. He was by far the most outspoken of the six bishops who stood before the King that night at ten o'clock. "Sire," he said, "I hope you will give that liberty to us which you allow to all mankind." He and his brethren disclaimed all disloyalty, but they would obey God rather than men. So they were dismissed with every mark of the royal displeasure. The next day was Sunday, and the curiosity and excitement were great. Would the clergy succumb and read the Declaration? Only four in London read it, and not more than two hundred in the whole country. Those who did so were despised for their pusillanimity, and the congregations quitted the churches the moment they began to read.

On June 8 the bishops were summoned to appear at the council board. Every effort was made to intimidate them and to cause them to become their own accusers. They were required to enter into recognizances, which they refused. A warrant was therefore made out against them, directing the lieutenant of the Tower to keep them in safe custody. They passed down the river in a barge, the people lining the banks all the way and kneeling for their blessing. Their prison was attended like a royal court. On the 15th they were brought up to Westminster, and indicted for having written, "under pretence of a petition, a certain false, pernicious, and scandalous libel." In the interval between the commitment and the trial the greatest efforts were made to induce Ken and his episcopal brethren to submit and ask pardon, but they all stood firm. On the day of the trial half the peers of England attended in the court. Their counsel denounced the King's dispensing power as illegal, and showed the absurdity of designating a petition privately presented to the King as a malicious libel. The judges were divided on the question of its being a libel; but the jury, after remaining locked up all night, came into court at ten o'clock on the morning of June 30, and the foreman pronounced a verdict of Not Guilty. The effect of this decision on the city, the camp, the King, and the nation has been already described. The portraits of the bishops were eagerly sought for and carefully cherished. A medal was struck bearing the effigy of the Archbishop on one side and of the Bishop of London and six other bishops, including Ken, on the reverse. Of these none was so remarkable, none so much beloved, respected, and admired, as he of whose life and character we must now add a few particulars.

Thomas Ken, Bishop of Bath and Wells, lived through two civil wars and two revolutions. He was twelve years old when King Charles I. was brought to the block, and twenty-four when, on the anniversary of "the royal martyrdom," Cromwell, after having governed England as "his Highness the Lord Protector," was dragged from his grave, his body suspended on a gibbet, beheaded, and buried again at Tyburn. Though educated during the Commonwealth, Ken early imbibed the principles of "Church and King," for which he afterwards suffered loss and deprivation. Educated at Winchester and New College, Oxford, he became a fellow of Winchester College; and when Charles II. had reigned as king about seven years, he was presented to the rectory of Brixton, in the Isle of Wight, and a prebendal stall in the Church of Westminster. We will not now follow him to Holland, where he was chaplain to the Princess of Orange, or to Tangier, whither he accompanied Lord Dartmouth. It is more to our purpose to remember how he stood by the bedside of the dying monarch, and exhorted him to repent sincerely and receive the holy communion at the hands of the bishops of his Church. Of all the prelates he was the one whom the King liked best; but upon this point he was not able to prevail with his royal master. He attended also on the unfortunate Duke of Monmouth in his last hours, and earnestly sought to induce him to meet his fate in a becoming spirit, and acknowledge that his resistance to the government of James II. was sinful. But here also the good bishop failed of success. Nowhere does he appear to greater advantage than in the jails of the West of England, exhorting and consoling the captives taken in Monmouth's train, whose religious and political principles he abhorred. Their coarse and scanty prison fare was improved by one whose beloved cathedral they had defaced and desecrated. In vain he pleaded for the victims of Jeffrey's "bloody assize," and described in pathetic language the deplorable state of his diocese. The whole air of Somersetshire, he said, was tainted with death. But James was inexorable; and not the least insane of his follies was that of alienating such a friend of monarchical principles as the Bishop of Bath and Wells. It was against all his wishes and instincts that Bishop Ken felt himself constrained to join in the consultation of bishops at Lambeth and in their petition to the King. Loyalty with him was little short of a passion; but the excesses of the Crown were so outrageous that even every moderate Roman Catholic deplored in secret the frantic conduct of the Government, which Protestants openly denounced and resisted. Yet this champion of England's liberties in Church and State, when James had been driven from his kingdom and a new sovereign had been called to the throne, could not bring himself to take the oaths of allegiance to William of Orange. James II., with all his overriding of the law, was still in his eyes the lawful king; and "not for wealth," as Lord Macaulay wrote, "not for a palace, not for a peerage, would he run the risk of ever feeling the torments of remorse."

Being ejected from his see in 1689, Ken retired to Longleat, now the residence of the Marquis of Bath, and then owned by one of his ancestors, Lord Weymouth. Here he composed many of those devout and affecting hymns, with two of which we are so familiar, the Morning and the Evening Hymn, — "Awake, my soul, and with the sun," and "Glory to thee, my God, this night." Not a morning breaks, not an evening closes, but tens of thousands of Christian souls commend themselves to the Divine Keeper and Guardian in these simple and sacred strains. It was at Longleat that the Bishop rested when on his way "to the Bath" for relief from an illness with which he had been seized at Sherborne. Here he took to his bed, and here breathed his last, desiring to be buried "in the churchyard of the nearest parish within his diocese, under the east window of the chancel, just at sunrising." The condition was fulfilled, and Lord Houghton has described the monument over his remains: —

"A basket-work where bars are bent, —
Iron in place of osier;
And shapes about that represent
A mitre and a crosier."

No one resisted the despotism of the last Stuart king with more effect than Bishop Ken, because his character stood so high for conscientious loyalty. The first rays of the morning sun do not, as he desired and intended, glint across the place of his sepulture; but the light of history will never fail to shed on his memory a beam of hearty approval and honest praise. Happily the Churchmen of the present day are seldom brought into such straits as he, — their path of duty is clearer and pleasanter; nor do religious persons now, like the fanatics of former times, think it a sacred duty to persecute their neighbors. We have not so learned Christ.

REGINALD HEBER.

REGINALD HEBER.

[Born 1783. Died 1826.]

AMONG the benefactors of men, spiritually or temporally, Heber is one who will command respect from men of diverse creeds and countries, the learned and the ignorant, old and young, rich and poor; for such was his power in manner, conversation, and unassuming kindliness, that he gathered universal respect, love, and veneration.

Descended from an ancient Yorkshire family, he was born at Malpas, in Cheshire, on April 21, 1783. Early in life he showed indications of the Christian temper and intellectual gifts by which he was in after life distinguished. Of the former, one anecdote will be enough. Travelling with his mother across the wild mountainous country west of Craven in very tempestuous weather, she became alarmed at the fury of the storm; but Reginald, sitting on her knee, said, "Do not be afraid, mamma; God will take care of us."

At eight years of age he was sent to the grammar school of Whitchurch, having learned the rudiments of Latin from his father. At thirteen he was put under a tutor for preparation for Oxford, and at seventeen years of age he entered Brazenose College. At this seat of learning he "soon became, beyond all question or comparison, the most distinguished student of his time." Here, as elsewhere, he became a centre of deep, earnest, and spiritual life, so that every one with whom he was brought in contact derived a salutary influence. In his first year he gained the prize for Latin verse by the "Carmen Seculare," and in 1803 for English verse by his "Palestine," which at once gave Heber a place among English poets. In the following year his father, whose conversation had great influence on his children, died. In 1805 Heber took his degree, and was elected Fellow of All Souls. In the same year he set out with his friend, Mr. John Thornton, for a tour in the North of Europe, Sweden, Norway, Russia, and thence to the Crimea, returning through Germany and Austria to England. He found a field little trodden, and in his correspondence exhibits great acumen. During his travels he kept an accurate journal, extracts from which were afterwards printed as notes to the travels of Dr. E. D. Clarke. They are written in the animated and picturesque style which rendered in after years his "Indian Journal" so fascinating and readable. Shortly after his return he began to prepare for holy orders. He had designed a work of "collecting, arranging, and illustrating all of ancient and modern literature which could unfold the history and throw light on the present state of Scythia, — that region of mystery and fable, — that source whence eleven times in the history of man the living clouds of war have been breathed over all the nations of the South." But now he determined to "apply himself wholly to this one thing," and, however fascinating the above plan was to a mind constituted as Heber's, it was firmly renounced and abandoned. About this period he took his degree of M. A., and soon after married Amelia, daughter of William Shipley, Dean of St. Asaph, and was settled in the living of Hodnet, Shropshire. In this parish he spent fifteen years. Here he, who might have won the highest fame in the literary world, devoted himself to what the world might esteem the humbler duties of a Christian pastor. He was happy in his visitation of the sick and afflicted. Daily he went among his people, advising the perplexed, comforting the distressed, relieving the needy, making peace among those at strife. When disease spread, he, at the hazard of his life, remained firm at his post. In society his character was as attractive as in the parish. "His talents might have made him proud; but he was humble-minded as a child, — eager to call forth the intellectual stores of others rather than to display his own, — equally willing to reason with the wise or take a share in the innocent gayeties of a winter's fireside. The attentions he received might have made him selfish, but his own inclinations were ever the last he consulted; indeed, of all the features in his character, this was, perhaps, the most prominent, that in him *self* did not seem to be denied or mortified, so much as to be forgotten. . . . That he was sometimes deceived in his favorable estimate of mankind, it would be vain to deny; such a guileless, unsuspicious singleness of heart as his cannot always be proof against cunning. But if he had not this worldly knowledge, he wanted it, perhaps, in common with most men of genius and virtue; the 'wisdom of the serpent' was almost the only wisdom in which he did not abound."

In 1812 he began a "Dictionary of the Bible," and published a volume of poems. In 1815 he was appointed to deliver the Bampton Lectures at Oxford, and chose for his subject "The Personality and Office of the Christian Comforter." These lectures were much admired for their research and illustration. In 1822 he published a life of Jeremy Taylor, with a review of his writings. A reviewer says of this work, it is "of maturer knowledge and more chastened taste than his lectures, and peculiarly interesting from the evident sympathy with which he contemplated the career of that heavenly-minded man, with whom, indeed, he had much in common."

In the same year he was elected preacher at Lincoln's Inn, where among his hearers were men distinguished in public life or in religious and philanthropical endeavors. In the following year a wider field of usefulness was opened up for him by the death of Bishop Middleton, of Calcutta. Severe was the conflict which now ensued in Heber's mind, thinking not of himself but others, between the love of country and friends, his own modesty which made him distrustful of himself, and the conviction that this was a call from God, and that to refuse would be to be deaf to the Divine voice. Twice he refused, but recalled his refusal, and finally accepted the office with views and feelings of the deepest and most conscientious nature. "In making this decision," he writes to Mr. Thornton, "I hope and believe that I have been guided by conscientious feelings. I can at least say that I have prayed to God most heartily to show me the path of duty and to give me grace to follow it, and the tranquillity of mind which I now feel (very different from that which I experienced after having declined it) induces me to hope that I have his blessing and approbation."

Having been made a D. D. by the University of Oxford, he returned to Hodnet to prepare for his departure to India. The fashion of presenting testimonials was not the custom of those days; but rich and poor united to give to him whom they so deeply loved a memento of their affection and respect.

He was consecrated at Lambeth on the 1st of June (Ascension Day), preached his last sermon in England on the 8th, on the 16th embarked on board the "Thomas Grenville," East-Indiaman, and on the 18th sailed from Deal. On board ship he officiated as chaplain, spending all his leisure in assiduous study of both Hindostanee and Persian. To him the circumscribed circumstances of a sea voyage brought no *ennui*. He found work and did it. On the 3d of October the vessel was safely anchored in the Sangor Roads. "The first sight of India," he writes, "has little which can please even those who have been three months at sea. The coast is so flat as only to be distinguished, when very near it, by the tall cocoa-trees which surround the villages." On the 7th he left Diamond Harbor (interesting as being the first possession of the East India Company in Bengal) on board the Government yacht, and on the evening of the 10th he landed in Calcutta. On his arrival he found a vast accumulation of business awaiting his attention. With his usual energy and unwearying industry he applied himself to it. But by systematic working he found time to become acquainted with the operations of every charitable institution and advocate the claims of every good work. He consecrated, soon after his arrival, the churches of St. Stephen, Dum-Dum, and St. James, Calcutta.

In his work he was brought into contact with men of diverse opinions and beliefs. He expresses his judgment in the following words: —

"This is, on the whole, a lively, intelligent, and interesting people. Of the upper classes a considerable proportion learn our language, read our books and our newspapers, and show a desire to court our society; the peasants are anxious to learn English, and though certainly very few of them have as yet embraced Christianity, I do not think their reluctance is more than might be expected in any country where a system so entirely different from that previously professed was offered, — offered, too, by those of whom, as their conquerors, they may well entertain considerable jealousy."

On caste he observes: "The institution of caste hardens their hearts against each other to a degree which is often most revolting." His whole energies were directed to the great work, the evangelization of India. He travelled extensively, planting churches and encouraging missionaries. Of his route through the upper provinces, between Calcutta and Bombay, a full narrative has been published in two volumes. He also visited the Deccan, Ceylon, etc., carrying out with characteristic zeal the great object of his mission. Success in some degree even in life crowned his efforts; but the fruit of his work was seen after his death, which so suddenly put an end to the personal carrying out of many projects for the benefit and welfare of India.

A very interesting account of his work on the day of his death appears in the journal of Mr. Robinson, his chaplain. He was found dead in his bath, evidently from apoplexy, April 3, 1826.

At sunrise on the following morning the remains of the Bishop were interred on the north side of the communion-table in St. John's Church, in the very place where but a few hours before he had blessed the people. The civil and military powers united to show every mark of esteem and love. The natives, without respect of creed, Hindoos and Mahometans as well as Christians, formed a vast concourse along the road leading to the church, that they might catch a glimpse of his bier. His name, as that of a man endowed with singular gifts, and influenced with a sincere desire to benefit his fellow-men, had become known to them, and had excited their reverence and regard.

The death of Heber excited a feeling of sorrow in India more widely spread than had ever been known before. Meetings were held in various places throughout the three Presidencies, in which the highest joined with persons of every rank and condition to deplore his death and devise means for honoring his memory. Especially was this the case at Madras, where natives and Europeans — without distinction of caste, color, or religion — united in raising a memorial. All felt that personally they had lost a friend, a benefactor, and a father. Memorials were raised in several of the Indian churches and in his own beloved Hodnet. In Bishop's College, Calcutta, scholarships were founded. A beautiful monument was erected in St. George's Church, Madras, and another in St. Paul's Cathedral, London.

Bishop Heber had not quite completed his forty-third year at the time of his death. "His sun was still in its meridian power, and its warmth most genial, when it was so suddenly eclipsed."

He gave early indications of that love for the classics, in the study of which he afterwards gained such high honors. At the age of seven he translated Phædrus into English verse. With a natural thirst for knowledge, a strong memory to retain what he had learned, and a glowing fancy, he combined also that industry and application necessary to develop the other faculties into important results. Not possessing originality in the same degree, the classics became his models. For the exact sciences he had not the same relish. Logic — at least as unfolded by Aldrich — he even disliked. He had a fine taste for drawing and natural history. He wrote a history of the Cossacks as a contribution to the "Quarterly Review." As an author he is most popular by his hymns and sacred pieces. These breathe a strain of the most exalted piety and Christian devotion, and thus accurately reflect himself. But it is in the Christian pastor of Hodnet, and the apostolic Bishop of Calcutta, that Heber is especially entitled to our regard, and calls forth our admiration for his devotion to his work, his energy when once the choice was made. No half-hearted endeavor did he put forth; but what his hand found to do he did with all his might, being animated with the highest enthusiasm, — that of the Christian.

WILLIAM PENN.

WILLIAM PENN.

[Born 1644. Died 1718.]

WILLIAM PENN was born in London in 1644. He was the son of Admiral Sir William Penn, a descendant from an ancient line of ancestry in Buckinghamshire, and distinguished as a naval commander under the Commonwealth and afterwards under the Government of Charles II. Admiral Penn was warmly attached to the cause of Charles, and entered into a secret correspondence with the object of placing him on the throne; but being detected he was for a time thrown into prison. Confinement, however, had no effect in deterring him from his plans and intentions. Immediately on his release he entered into union with Monk and others; and they finally achieved their objects, for which royal favors were abundantly bestowed and as eagerly accepted by one of the most vain and ambitious men of the time.

Admiral Penn had strong resolves for his ambition. Himself already on the ladder of fame, having acquired wealth as well as powerful friends and allies, he sought hard for additional royal favors, all of which in the extravagance of anticipation he hoped one day to heap upon his son. William Penn, however, proved himself incapable of impression under the projected charm of such a brilliant career. He was inclined to be serious, fond of meditation and retirement, and exhibited a manifest objection to entertain the proposals and designs of his father. This arose from an independence of mind and depth of thought which in after life proved to be the basis of his remarkable, manly, and Christian character. His education commenced at Chigwell Grammar School; subsequently he was removed to a private school on Tower Hill, and a special tutor was retained for him in his father's house. His progress in learning was rapid, and at fifteen he entered Christ Church, Oxford, where he was associated with Robert Spencer, afterwards Earl of Sunderland, and the celebrated John Locke. Here the general seriousness of his deportment was shaken for a time by the influence of surrounding associations; but he nevertheless continued his studies with unabated vigor, by which his taste for languages, history, and theology was considerably enlarged, and his mental powers were developed. He was conspicuous for force of argument on theological subjects and strong opposition to the popish practices of the day, and at this period was probably influenced by a new form of belief, from which it may be said his real life in all its phases began. He renounced the pompous and imposing ritual to which the university commanded obedience, and, with several others, preferred the simple and unostentatious mode of worship of the despised Quakers. Threats and persecution followed. The academical gown was laid aside; an order of Charles for its restoration was contemptuously disregarded; and the climax of rebellion was reached by the non-comformist few tearing the badge from the backs of the more compliant graduates. This act, in itself to be condemned, was, however, the embodiment of a power yet in its infancy, which was destined to achieve greater victories, and tear away the hideous outgrowths of a superstitious and sophisticated age. Penn and his associates in the schism were locked out of the university. By this act the State religion lost an ardent worker and an able advocate; while the Christian Church gained a sincere exponent of the truth, and probably the most powerful enemy to all that is adverse to the worship of the New Covenant. The disgrace which the son thus brought upon himself mortified and chagrined his father, and William Penn was banished from his paternal home. The Admiral intended that his son should become a great man; but he little knew how in the highest sense this would be accomplished, while his own plans in the same direction would be set aside.

William Penn retired to France. He was received at the Court of Louis XIV., but still continued his intellectual studies, and acquired considerable knowledge by European travel. On his return he was put to the study of the law; but the immediate outbreak of the great plague caused him to alter his plans, while he became awfully impressed with the solemnity of the visitation, by which thousands were suddenly snatched from business and the cares and whirl of giddy life. These impressions were doubtless confirmed subsequently when attending in Cork a meeting of Friends, at which Thomas Loe, a minister of the society, was present, and whose meeting William Penn attended at Oxford.

Admiral Penn soon learned that his son had turned Quaker. He was summoned home, and his father demanded an explanation; but all that could be done was without avail. William Penn's mind was irrevocably fixed, his Christian principles established, and from these he resolved never to swerve. He was again expelled from his father's home, and, adopting the simple attire of a despised Quaker travelling in the ministry, visited various places preaching the Word. He had now laid aside the gay trappings and arms of the period, and had taken up the sword of the Spirit, with the helmet of salvation and the shield of faith; he had spurned a ducal coronet and accepted by faith a princely crown.

The life and manner of William Penn were wholly changed. Realizing the priceless value of salvation, and fully alive to the high and noble privileges which follow on the Christian life, he resolved to devote himself henceforth to the work of spreading the light to the benighted thousands around. The corrupt state of the Church and the dogmatism of its blind followers fostered a continued line of persecution against all who dared to think differently on spiritual matters; hence thousands of Dissenters were thrown into prison to end their days in filth and a poisoned atmosphere, and in protracted suffering and even starvation. William Penn, with others prominent in raising the voice of truth against error and oppression, became a sufferer, and spent many years of his life within prison walls for conscience' sake. But here he was not idle. His busy brain and ready will stood him in good need; for he occupied his time in diligently writing and issuing the results of his labors, either as trenchant and unanswerable replies to his opponents, or in the tender, loving appeals to his coworkers and those whose salvation he earnestly longed and prayed for. His literary productions at these times were numerous; among them may be particularly named, "No Cross, No Crown," which at the present day is much valued by believers.

Unsettled as these times were, mainly by reason of the fierce opposition of those whose mission, if rightly performed, should have been the preaching of peace, it was impossible for a man of William Penn's character and feelings to escape the bitter persecution of those whose acts he questioned and condemned. As a leader he was a marked man, and always one of the first to be roughly handled and carried to prison. His sufferings were only exceeded by those who were led to the stake; yet in patience was his soul preserved. The Bishop of London sent him word he must either recant or die in prison. To this he only smiled and quietly said, "They are mistaken in me. I value not their threats; I will weary out their malice; my prison shall be my grave before I will budge a jot, for I owe my conscience to no man." The account of his trial at the Old Bailey in 1670, and his defence, is one of the most interesting records of events touching the persecution of the Friends. Of the results of this trial it has been said, "It established a great truth, that unjust laws are powerless when used against an upright people."

From this period William Penn assumes a more prominent and useful character. While he suffered he was not unmindful of the pangs of others, and his spirit, vexed and grieved, yearned for the day of deliverance. His belief was that, in common with all Friends, and as it had been handed down to them by the simple-hearted Christians of previous ages, man should have free and unfettered liberty to worship God as he was led to think best. On this understanding he pleaded the same toleration to the Roman Catholics, and for it was denounced a Jesuit in disguise, which had the effect of producing a special form of persecution. For a time William Penn again travelled on the Continent. This gave him an opportunity of spreading gospel truths, while he secured partial rest from the wrath of his enemies. His intercourse was not confined to the poor or middle classes, for frequently his meetings were held with the members of many noble families who remembered with gratitude his earnest ministry in their behalf. About this time Admiral Penn felt his end approaching, when he fully relented towards his son, to whom he said, "Son William, if you and your friends keep to your plain way of preaching and to your plain way of living, you will make an end of the priests to the end of the world."

William Penn married in 1672, and settled at Rickmansworth; but his spirit was still one of anxiety for the welfare of his friends, and he continued to look around for some means by which he might aid their escape from bitter thraldom. Subsequently he removed to Worminghurst, in Sussex, where in closer retirement he could further the end in view. In 1675 two Friends, having some differences relative to a tract of land in New Jersey, left the matter to the arbitration of William Penn, who finally became trustee and manager to the western part, and framed a constitution for it, the result being the formation of a colony on entirely Christian principles. The enterprise succeeded admirably, and he at once formed other resolutions for the assistance of his persecuted brethren. The death of Admiral Penn placed his son in the receipt of about £1,500 per annum, and there were in addition claims on Government, chiefly for money lent, which by the accumulation of interest had increased to upwards of £16,000. William Penn petitioned the Privy Council to grant, in lieu of money, by letters patent, a tract of land, then unoccupied, adjoining Maryland and New Jersey. The scheme was referred to a committee. It was denounced as Utopian, wild, and impracticable, an encouragement to the dissolute and discontented, and dangerous to existing governments; but after protracted delays the request was granted. The new colony was named Pennsylvania by the King in honor of Admiral Penn, and as indicative of the wooded nature of the country.

Wearied with the pride, selfishness, and heartless cruelty of the Old World, William Penn in the fulness of his Christian love and generous mind now turned to the New. His dearest hopes were about to be realized. Here he would carry out the designs he had so long cherished; here his persecuted and oppressed brethren should find a peaceful home and freedom of worship; here peace and Christianity should form the principles of government, while the ignorant savage of adjoining lands should be taught to regard the settlers as friends, and be prepared to receive the glorious truths of the gospel. Although the King made Penn a grant of this territory, which was about three hundred miles long and one hundred and sixty broad, he nevertheless deemed it his duty to purchase it from the Indians who roamed over it at will. He further agreed with them to refer all differences to a conference of twelve persons, — six whites and six Indians. This arrangement gave great satisfaction, and the savage tribes remained fast friends ever afterwards.

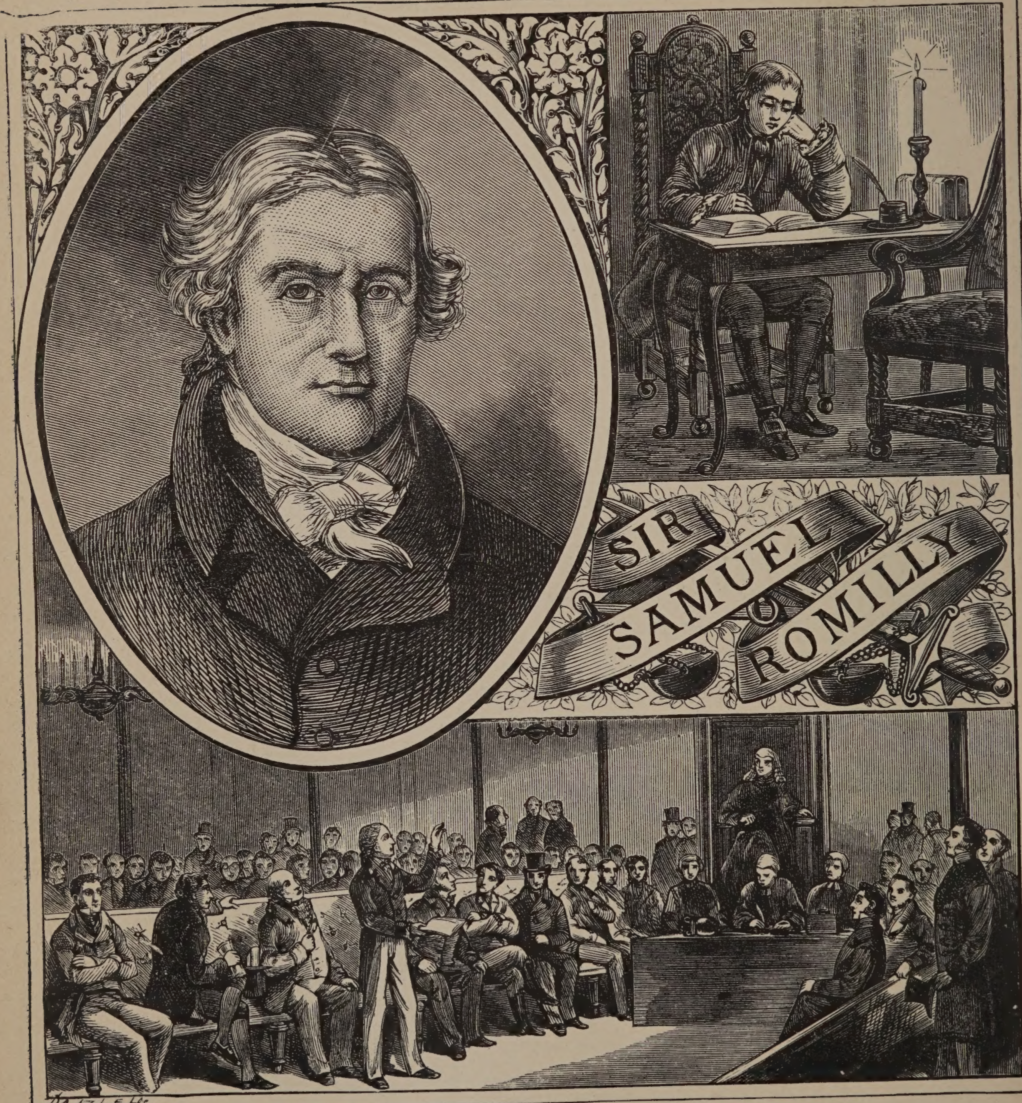
The noble words in which Penn laid down those broad principles of truth and justice which were to signalize his dealings with the red men — words which carried to their simple minds such conviction of the white man's honesty of purpose as at once secured their confidence and respect — deserve to be inscribed in letters of gold. "The Great Spirit," said Penn, "who made you and us, who rules the heaven and the earth, and who knows the innermost thoughts of man, knows that I and my friends have a hearty desire to live in peace and friendship with you, and to serve you to the utmost of our power. Our object is not to do injury, but to do good. We are here met on the broad pathway of good faith and good-will, so that no advantage may be taken on either side, but all shall be openness, brotherhood, and love. I would not compare the friendship now sought to a chain, since the rain might rust it or a tree fall and break it; but the Indians shall be esteemed by us as the same flesh and blood with the Christians, and the same as if one man's body was to be divided in two parts, and, as such, the ground should be occupied as common to both people." So "Penn's Treaty," as it is called, has become one of the important landmarks of American history. Its commemoration by West's pencil has given it a place as such beside the "Landing of the Pilgrims" in the popular regard of the nation; for since all Christian people now feel greater pride in the conquests of peace than in those of war, Penn's work grows greater with the lapse of years.

The government of the colony was amply set forth in a code of well-devised declarations, and in no respect was it ever asserted that the plan was imperfect or unsuitable. As long as peace-loving Christians were connected with the administration of the laws and government affairs, no cause for alarm was present; but in this as in all human enterprises traducers were not wanting who represented Pennsylvania as in confusion, on which the King was prevailed, in 1692, to deprive William Penn of the government of it and confer it upon Colonel Fletcher, of New York, under whose despotic and military care it only remained two years. In 1694 it was restored, to the great satisfaction of all concerned. The government of the colony under William Penn was peace and tranquillity. The oath was never administered. The constable's staff was the only symbol of authority. Soldiers were neither required nor employed, and perfect equality existed among all religious denominations. The world may take example and proof of what may be accomplished by a people bent on a mission of love and peace. Penn's treaty with the Indians shows what can be done even with a nation of savages, and his whole life is a bright example of what a noble mind and Christian impulse can produce even upon the most untutored beings.

The remainder of Penn's life was spent in great activity,— in ministry at home and abroad, and in religious visits to the highest personages; in repeated visits to Pennsylvania; in pleading the cause of his brethren at the English Court, to which he always had access; in writing religious works and suffering in prison. Throughout he possessed indomitable energy and perseverance, combined with the love and gentleness of a child. Although he suffered the keenest persecution he was ever ready to return good for the evil. He suffered for a principle. His life was sacrificed completely for the welfare and happiness of others; his was a heroism little short of martyrdom, and to William Penn and his contemporaries we are at this age indebted for many of the blessings we enjoy. Among his many writings not the least valuable is his "Essay toward the Present and Future Peace of Europe," — a code of principles which have been variously reproduced of late years, not without good effect.

William Penn's health suddenly failed in 1708, after a tedious imprisonment. He retired to Kensington, and subsequently to Rushcombe, in Berkshire, where he still occupied his time in literary work, his last production being a preface to the writings of his friend Joseph Banks, in 1711, which he dictated as he walked, cane in hand, about the room. At length he became enfeebled, and in 1718 he peacefully closed his remarkable, interesting, honorable, and laborious life, at the age of seventy-four, and was interred at Jordans, a quiet hamlet in Buckinghamshire near his former home, and where rested the remains of his first wife and members of her family, the Penningtons. Around his grave a large concourse, not only of Friends, but members of other religious denominations from all parts of England, assembled, all anxious to do homage to the virtues of a man of whom it may be truly said, "He lived only for others and heaven, for the suppression of cruelty and wrong, and for the glorification of God."

The fact that such men as Penn are constantly in the midst of their species from age to age is the hope and safety of humanity; for without them the race must degenerate, and lose its special claim to superiority in the system of created intelligence. He was great in his own day, but he has become greater in the eyes of posterity. Hence, although no monumental marble marks his grave, nor sculptured records blazon forth his deeds, his name still lives in the hearts and memories of thousands; and through him the Indian savage and the white man mutually rejoice, hand in hand, in a common salvation which shall last when time shall be no more, and monuments perish with the dust and decay of worlds.



SIR SAMUEL ROMILLY.

SIR SAMUEL ROMILLY.

[BORN 1757. DIED 1818.]

AMONG many celebrated and successful advocates who have been members of national legislative bodies, but very few men have distinguished themselves as great liberal-minded politicians, brilliant senatorial debaters, and wise and energetic reformers. Of those who have achieved this superior reputation, Sir Samuel Romilly is a remarkable example; for not only was he the first advocate and the most profound lawyer of his age, but he was also a judicious and eminently practical politician and a most powerful parliamentary speaker. From the great and commanding talents, deep learning, and moral goodness he possessed, and the wise use he made of these qualities for the public good, and from which important results have followed, he has earned the admiration and esteem of all intelligent persons as an eminent public benefactor.

This great and good man, who was born in London in 1757, was the son of a jeweller who carried on business there. His early education appears to have been very defective; but by much assiduous and systematic study after he left school at fourteen years of age, he became a well-educated youth. In his sixteenth year he was articled to one of the six clerks in Chancery, with the view to the purchase of a seat in their office at the end of his articleship. His disinclination, however, to inconvenience his father to make this purchase induced him to renounce entirely his prospects of this appointment at the Six Clerks' Office and to study for the bar. Accordingly, on serving his articleship and completing his twenty-first year, he became a member of Gray's Inn and a pupil of an able equity draughtsman, and began to study law with great energy. He also much improved his mind by useful general reading, by translating the Latin historians and orators, by sometimes writing political essays for the newspapers, and in occasionally attending the Houses of Parliament to exercise his powers of abstraction, argument, and expression in writing imaginary replies to the debates which he had heard there. The severe mental labor which he underwent during his studentship for the bar proved so injurious to his health that he was compelled to relinquish his studies for a time, and to go to the Continent to recover his strength. At Geneva and at Paris he became acquainted with several eminent men, including Dumont, D'Alembert, and Diderot, who produced a very marked effect upon his character and opinions.

Romilly was called to the bar in 1783. He commenced his practice with drawing Chancery pleadings, an employment which gradually increased; but, like many other eminent barristers, he was compelled to wait for some years before he had occasion to speak in court. Early in the following year he joined the Midland Circuit, which he continued to frequent until the extent of his practice in the Court of Chancery obliged him to confine himself to London, he being at that time, which was about the end of the last century, leader of his circuit. A few months afterwards he was made a king's counsel; and this honor caused his equity practice to increase so rapidly that in five years subsequently he had more briefs in the Chancery Court than any other barrister who attended it. The Bishop of Durham at this period conferred upon him the Chancellorship of the County Palatine of Durham, which he held for several years. He was also appointed Solicitor-General, and knighted in 1806, on the formation of the Grenville Administration, and was brought into Parliament by the Government as member for Queenborough. On the trial and impeachment of Lord Melville, Sir Samuel Romilly was appointed one of the managers for the Commons, and summed up the testimony in support of the charge. On the dissolution of the Whig Administration in 1807 he went out of office.

But this eminent lawyer will probably best be appreciated by the vast majority of the public as a great politician, and the reforms he advocated in and out of Parliament, and especially as regards the repeal and amendment of the criminal laws. For a long time before he left the Midland Circuit Romilly was much esteemed for his political knowledge and wisdom; and the publication of two pamphlets by him — one called "A Fragment on the Constitutional Power and Duties of Juries," and the other "Observations on a late Publication entitled 'Thoughts on Executive Justice'" — very materially enhanced his reputation as one likely to become a wise and judicious criminal-law reformer. He was three times offered a seat in Parliament before he was appointed Solicitor-General, namely, twice by Lord Lansdowne, shortly after he was called to the bar, and once in 1805 by the Prince of Wales (afterward George IV.). All these offers, however, Romilly declined, from a feeling of independence. After the Whig party was overthrown in 1807, under whom he was Solicitor-General, he was returned to the House of Commons for Horsham in the interests of the Duke of Norfolk; and after also representing Wareham and Arundel, he was ultimately returned for Westminster in 1818.

As to the important legal measures of reform which Sir Samuel Romilly brought before the notice of Parliament, the first was a bill for the amendment of the bankruptcy laws, which passed both Houses, and effected important improvements in such. He then introduced a bill to make real property assets in all cases for the payment of simple contract debts. This, however, was rejected by a considerable majority. But a bill based upon a more limited application of the same principle, by limiting it to the freehold property of traders, was proposed by him in the next parliamentary session, and became law.

At the time Sir Samuel Romilly entered Parliament there was probably no nation in the world in which so many and so great a variety of human actions were punishable with death as in England. No less than three hundred crimes, of various degrees of moral guilt, were then declared capital. The existence of such sanguinary laws was not only terribly cruel and unjust, but, as they rendered the administration of criminal justice very uncertain, its efficiency was much impaired and its utility greatly diminished. Having devoted much of his attention to the theory and practice of penal economy generally, and to the English criminal laws in particular, and being possessed of enlarged and philosophical views respecting the welfare of the people, and a benevolent disposition to advance their true interests as far as he was able, this great and good man resolved to attempt to improve these iniquitous laws as far as he consistently could; and no individual in his time was so competent to advocate practical legislative measures to attain this philanthropic object. It was Romilly's urgent wish to advocate the repeal of all the statutes at once which punished with death mere thefts unattended with any violence or other circumstances of aggravation; but as he thought there was little probability of a bill passing in Parliament for so great a reform, he determined to propose in detail the repeal of particular laws by which punishments of disproportionate severity were declared to be inflicted, and thus to gradually expunge the whole from the statutes. Accordingly he presented a bill in 1808 to repeal the statute 8 Eliz. c. 4, by which the penalty of death was enacted for privately stealing from the person of another; and this measure was passed, after some objection and debate, in the House of Commons. In 1810 three bills were introduced by him for the repeal of certain statutes making the punishment capital for stealing privately in a shop to the value of five shillings, and of stealing to the amount of forty shillings in dwelling-houses or in vessels in navigable rivers. His speeches on these proposed reforms were supported by a publication he issued, entitled "Observations on the Criminal Law as it relates to Capital Punishments and on the Mode in which it is administered." The first of these bills passed the Commons, but was lost in the House of Lords, and the other two were rejected. In the subsequent year the two latter bills were again brought forward, as well as a further one to abolish the extreme penalty of the law for stealing in bleaching grounds. The four bills were passed in the Lower House, but only the last-mentioned one received the royal assent. The Act of Parliament under which persons were directed to be hanged for privately stealing in a shop to the value of five shillings was, according to Sir Samuel Romilly, "the most severe and sanguinary on our statute book, and not only inconsistent with the spirit of the times in which we lived, but repugnant to the law of nature, which had no severer punishment to inflict for the most atrocious of crimes. . . . In the year 1785 no less than ninety-seven persons were executed for this offence in London alone, and the dreadful spectacle exhibited of twenty suffering at the same time." The reasons advanced against the aforesaid criminal-law reforms were extremely ridiculous, and almost incredible for such an enlightened age. The most serious opposition to them, however, emanated from Lord Chancellor Eldon and Lord Ellenborough, Chief Justice of England, as they were both of opinion that the criminal code could not be too severe. Indeed, the latter nobleman, according to Lord Campbell, "was as much shocked by a proposal to repeal the punishment of death for stealing to the value of five shillings in a shop as if it had been to abrogate the Ten Commandments." Other peers dreaded the abolition of this odious law, as its repeal would, as they thought, ruin half the shopkeepers in London.

Now, although the more important measures of criminal-law amendment advocated by Romilly did not become law in his time, he was so convinced of the justice of their principles that he endeavored to cause them to form part of the statute book in each succeeding session of Parliament until his death.

This eminent man also took an active part in discussing all the more important political questions which were introduced in the House of Commons while he was a member of it, with great credit to himself and the party to which he belonged. The death of his wife in October, 1818, to whom he was very much attached, so preyed upon his mind that he put an end to his life in the following month, in his sixty-second year, and his death was considered a great national loss.

His second son, the late Lord Romilly, who was an eminent

Equity judge, graduated at Trinity College, Cambridge, and was called to the bar in 1827. He was made Solicitor-General in 1848, Attorney-General in 1850, Master of the Rolls in 1851, and elevated to the peerage as Baron Romilly in 1866. He resigned the Mastership of the Rolls in 1873, and died at the end of the subsequent year.

The superior abilities of Sir Samuel Romilly were such as were well suited to promote the philanthropic views he advocated. He possessed the combined powers of lofty eloquence and critical argument, and his oratory was distinguished not only by precision and great force of reasoning, but by much keenness of satire and dramatic expression. His parliamentary independence was never injured in the slightest degree; and while the remarkakle integrity and excellence of his character gained him the respect of all parties, his transcendent abilities were admired by friends and enemies alike. "Few persons," said Lord Brougham, "have ever attained celebrity of name and exalted station, in any country or in any age, with such unsullied purity of character as this equally eminent and excellent person;" and Sir James Mackintosh spoke of him as one whom he considered "as among the wisest and most virtuous men of the present age." As to his private virtues and habits, these were highly estimable, and considerably added to the lustre of his public reputation. The amiability of his character and the modesty of his manner rendered his society very attractive. In short, his moral conduct was so praiseworthy and superior, that it will always be considered by right-minded persons an excellent model for imitation.

SAMUEL WHITBREAD.

SAMUEL WHITBREAD.

[Born 1758. Died 1815.]

THE newspapers of to-day and the present generation love to call a living statesman the tribune of the people; and this proud title can with equal right be given to Samuel Whitbread, who was a prominent figure in English parliamentary history during a portion of the so-called Georgian era.

Samuel Whitbread, son of a brewer, and afterwards the same himself, was born in 1758. He was educated at Eton, matriculated at Christchurch, Oxford, but finally went to St. John's, Cambridge. He left college in 1785, after which he was sent on the Continent for a time in charge of a tutor. Soon after his return in 1788 he married a daughter of Sir Charles Grey, afterwards Earl Grey, and father of the celebrated Premier of that name.

Two years later, in 1790, he commenced public life by offering himself as a candidate for the representation of Bedford, and after a keen contest was elected by a majority of twenty-seven.

He took his seat below the gangway, and throughout his life he claimed for himself an independence of action irrespective of the ties of party, pledging himself to no particular course of action save what conscience prompted, humanity appealed for, and right demanded.

The pauper, whose poverty was looked upon as a crime, cheerfully bore his heavy burden; the black, whose body showed the marks of cruel wrong, went about his heavy task with an almost lightsome heart; the imprisoned editor, whose only fault had been to maintain the justice of a cause right in his eyes though unpopular with the Government, sat contented in his prison cell; the subject who for religion's sake was denied the same privileges as his fellow-countrymen viewed the future with complacency: for one voice that rose above the din of party cry fearlessly and eloquently urged humanity for white and black, demanded the freedom of the press not as a privilege but as a right, and proclaimed that the Roman Catholics were as true to King and country as their Protestant brethren, and therefore entitled to equal rights and liberties; and that voice was Samuel Whitbread's. The poor-laws at the time were a disgrace to even the then low state of civilization. Instead of being used they were abused, and instead of being a means of relief they were an engine of pettifogging tyranny. Samuel Whitbread brought in a bill to alleviate the distress of those who had to seek relief; but his proposed reform was in advance of the age, though in 1812 he had the satisfaction of seeing a measure passed which, if not exactly similar to his own, contained many of the same provisions, and might almost be said to have been his work.

The mighty exertions and unflagging zeal of Wilberforce have caused his name alone to be identified with the abolition of the slave trade; but nevertheless a share of the honor is due to Samuel Whitbread, who fiercely denounced this legal traffic in human flesh and blood, and who as fiercely denied, when it was proposed to compensate those engaged in it, that any vested interest could be claimed by them, who morally if not legally had been wrongdoers from the very beginning.

John Wilkes, the sturdy editor of the "North Briton," was imprisoned for sedition; but Samuel Whitbread, though avowing that he did not share in the demagogue's opinions, demanded his instantaneous release, — and obtained it too, — claiming that freedom of speech was the birthright of every Englishman, nay, more, was an heirloom for which their forefathers had wasted their estates, and had not only shed their own blood, but had even not hesitated to dethrone their liege lord as well.

The Roman Catholics at this time were denied the privilege of sitting in Parliament, and had to submit to other disabilities enforced by various statutes directed against them; but Samuel Whitbread, though himself a Protestant above suspicion, insisted upon the repeal of these enactments, declaring that the Roman Catholics had proved themselves to be Englishmen first and Roman Catholics afterwards; and when a member of the Ministry accused Daniel O'Connell of trying to excite the Catholics against the Protestants, even went so far as to say that this was not to be wondered at, seeing that the refusal of the Ministry to grant Catholic emancipation could only tend to stir up the Protestants against the Catholics.

In foreign politics he was in favor of what has since been designated as a policy of "masterly inactivity." He was of opinion that it was England's duty to keep aloof from the struggle then being fiercely waged by France against the rest of Europe; but a greater man, or at least a greater statesman, than he — perhaps the greatest statesman ever produced by England — enjoyed the confidence of the country; for William Pitt the younger, ever affectionately known as "Billy" Pitt, was in the zenith of his power. Other great men, such as Fox, Burke, Sheridan, or Whitbread, might be allowed to furl a sail or tighten a rope; but Pitt, and Pitt alone, was capable of steering the national ship; and so war was declared against France, or, more correctly speaking, against Napoleon. Historians have generally pronounced in favor of the necessity of the wars waged for national security; but it must always be remembered that those who opposed their declaration at least did good service by ventilating the rights or wrongs of that now famous and historical struggle.

If, however, Whitbread opposed the war with France, he gave, when once it was declared, an active support to it; for not only did he raise at his own expense a body of yeomanry, but he even took the command in person.

When Lord Melville, the treasurer of the navy, was impeached for the misappropriation of a large sum of public money, Whitbread was deputed by the opposition to appear against the alleged offender; for it was felt that the office of prosecutor had best be held by a man whose whole life had been so blameless and thoroughly honest. Lord Melville, however, was finally acquitted by the Lords, partly, if not altogether, owing to the influence of, and the respect felt for, William Pitt, whose own honesty and integrity were almost proverbial; but the moderate yet firm tone of Whitbread gained universal approbation from friend and foe alike, and all felt that a sense of duty and a zeal for the nation's welfare had alone tempted him to undertake such a thankless and ungrateful task.

As a philanthropist and a patron of arts he was also distinguished; for though no particular charity or institution is identified with his name, he freely gave large sums of money towards worthy objects, taking good care never to advertise his generosity, but, on the other hand, blushing to find it fame. When the finances of Drury Lane Theatre were in such a confused and low state that the closing of the house seemed inevitable, he voluntarily offered to put them in order, and in addition subscribed a handsome sum.

This self-imposed task cost him his life. He had become exceedingly stout, and on this account was liable to fits of dizziness caused by a rush of blood to the head. The doctors prescribed absolute quiet and rest; but he refused to obey their commands, saying that he had undertaken the task and therefore he would complete it. His end was indeed of a tragic and awful nature. On the 6th of July, 1815, he committed suicide after dinner, in a fit of temporary insanity, — the direct result of overwork.

By a strange coincidence his last vote, cast in the House but two days before, was in favor of a vote of thanks being given to the Duke of Wellington; for though, as before stated, he never approved of the war, he nevertheless considered that, since the country had decreed that it should be waged, the country's thanks were most certainly due to the hero of a score of campaigns and the victor of Waterloo.

Little has been said about Samuel Whitbread's private life; but as a husband and a father or as a statesman and a benefactor he is equally entitled to our admiration. He lived on the greatest terms of affection and happiness with his wife, and he almost lived again in his children. He was not only their father, but a friend as well, an interested listener to their joys and troubles, a kind of stern judge of their wrong-doings, swift to punish, but equally swift to forgive. Altogether he had five children, three sons and two daughters, all of whom, with the exception of one son who died in infancy, survived to grieve his loss.

As an orator, it is said his speeches were luminous rather than brilliant, characterized by sound sense rather than by daring flights of fancy; but he lived in an age when there were more men gifted with the highest quality of eloquence than perhaps there have been before or since. It was indeed an age of giants. There were Pitt and Fox, Burke, the English Cicero, Sheridan, unequalled as a wit and almost unrivalled as a debater, besides many more who very nearly attained as high a standard; and at that time to have been considered even a second-rate orator was saying a good deal.

Too conscientious to be a partisan, too ready to give an ear to the oppressed whoever they might be, Samuel Whitbread never took office, and on this account his name is certainly less familiar than some who in reality achieved far less; but the most deserving are often forgotten by posterity, or at any rate by the undiscriminating and non-inquiring many. His claims on the present generation may not be acknowledged, but they were granted in full by the past. It is said that the first question a stranger put on entering the House was, "Which is Mr. Whitbread?" so great was the popular admiration for him. No man's death was ever more sincerely mourned, and at his grave the tears of friend and foe mingled together. A writer chronicling his death describes his character in a few words, which, however, speak volumes. He says — and few will disagree with him — "that whether as a private individual or a public character Samuel Whitbread appears to have been entitled to the applause and gratitude of his country."

WILLIAM WILBERFORCE.

[Born Aug. 24, 1759. Died July 29, 1833.]

"GO on in the name of God, and in the power of His might, till even American slavery, the vilest that ever saw the sun, shall vanish away." The words were at once a prophecy and a prayer. His disciples gathered round him, his trembling fingers scarcely able to hold the pen, the founder of a powerful sect addressed to Wilberforce this pathetic and solemn adjuration. It is possible that Death, looking over the old man's shoulder, saw how good was what he wrote, and, anxious that the last utterance of a mighty spirit should be eloquent, gently loosened the single thread that held together soul and body. For the legend — a legend few but must love to credit — describes this as the last letter John Wesley penned.

It was in the very fiercest of the conflict that the apostle of Methodism died. Years had already elapsed since the commencement of the struggle, and many forms were now coffin-dust that had been seen in Westminster Hall on the day when, in the presence of the Lord Chief Justice of England, and with the applause of three nations welcoming it, a verdict was delivered declaring, as with the inspiriting voice of a trumpet, that no breath of slavery should be suffered to infect English air, but that the whole island should be a sanctuary forever consecrated to Liberty, which, if any bondsman succeeded in reaching, he instantly became *free!* Then were first proclaimed the principles that, spreading, — as of old the gospel to which they owe their birth had spread, — have proved more powerful than the power of princes, more persuasive than the temptations of wealth, that have penetrated to the swamps of Louisiana and the forests of Hayti, whose army of martyrs includes such men as Lincoln and Livingstone, and whose conquerors are dia-

WILLIAM WILBERFORCE.

demed with a glory that shall not fade away. And never in the press and thick of the battle did there strive a heartier champion than Wilberforce. He was the knight upon whom Freedom could rely to be faithful even unto death. Others might covet the admiration of the multitude or the applause of senates; he sought only to take from Britain the reproach that, though hers was a free soil, she trafficked in slaves!

No man was ever a truer patriot. His love of country was not indeed such as might have influenced an Athenian or a Roman. It was a nobler feeling than that which caused Decius to veil his head and seek death in the thickest of the battle, or Scævola to give his right hand to the Tuscan fire. Such a patriot as Wilberforce did not covet for England that in her hand should be the sceptre of the world, — that she should go forth as Death on the Pale Horse, "conquering and to conquer." He desired above all things for his country that her sword should strike only on the side of Right, that her crown should be the crown of Righteousness, and her place in the van of Truth. He could not endure to see her do wrong; a stain on the national honor chafed him as though it soiled his own. And beholding, even while yet a boy, how miserably the leprosy of slavery had spotted that beloved mother-land, he resolved, God aiding, that his life should be devoted to freeing her of her shame.

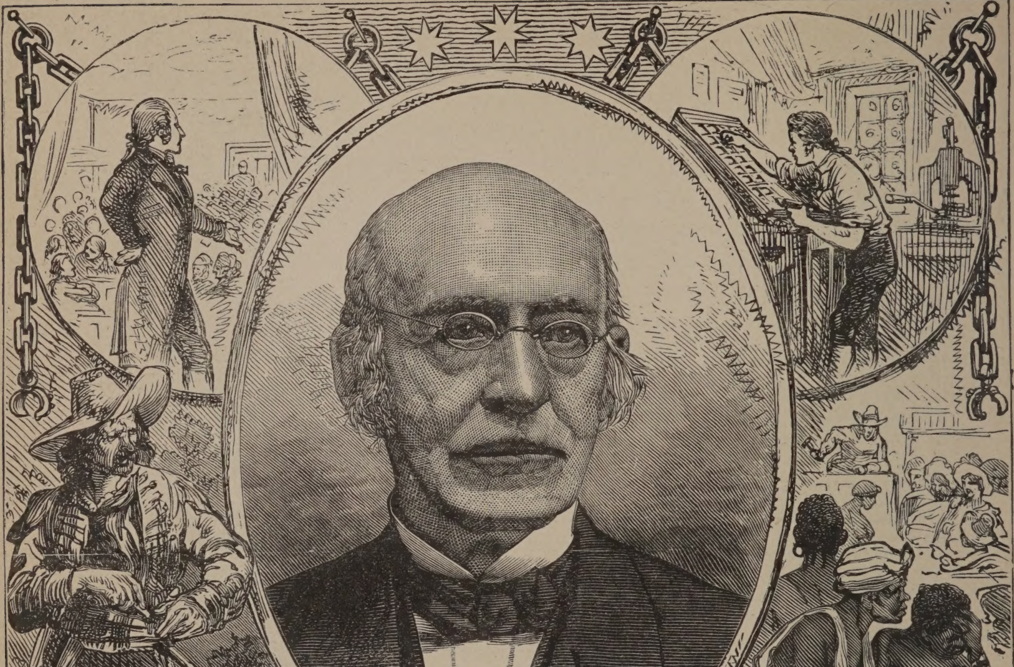
Two scenes in the life of this great man are invested with a peculiar grandeur. Let us draw back the curtain of the past and regard them for a moment.

The first was the night of May 13, 1789. In the old House of Commons, that building where Pitt shone chief in oratory and Fox in debate, Wilberforce launched the first thunders of his eloquence against the slave-trade. It was his pledge to give up the world and follow Christ. Young, wealthy, the representative of the largest shire in England, there seemed scarce a pinnacle, even among the giddiest summits of political ambition, to which he might not aspire to climb. But his heart was set on nobler things. He knew that, while he took his ease in England, voices across the Atlantic would be crying out for the

Death that should come as a deliverer from intolerable pain. Day and night there was present to his mind's vision the horrible hold of the slave-ship, with its cargo of suffocating captives torn from all humanity holds dear. His ears were filled with such cries as that which broke from the mother of Josiah Henson, when the purchaser of her last child tore it from her grasp and kicked her away, — "Oh, Lord Jesus, how long? how long?" And so on that May evening Wilberforce rose, and suffered the indignation of his heart to burst forth in burning words.

After almost twenty years came the triumph. On the night of Feb. 23, 1807, the Abolition Bill was removed to the Lords by a majority of 283 to 16. Slander, insult, the bitterness of hope deferred, the coldness or treachery of friends, the persistent malice of enemies, — all these had the now veteran champion encountered, and over them all had he at length prevailed. Sir Samuel Romilly took occasion to contrast the work of Wilberforce with that of Bonaparte. The master of armies would lie that night in the Tuileries, and even in his dreams see Europe at his feet. The Apostle of Freedom would seek a less stately roof and a humbler pillow; but over his pillow would hover the glorious certainty that everywhere throughout that empire on which the sun does not set, the slave, by his and his colleagues' efforts, was at length FREE! As the words left the speaker's lips the House rose almost to a man, and, every eye directed towards Wilberforce, burst into a thunder of applause.

Twenty-six years later the Liberator died. He was laid near the north door of the Abbey, — a resting-place appropriated to statesmen. His neighbors in death are many and famous. There Pitt and Fox, the long quarrel of their lives forever composed, lie side by side. A shapely figure of marble marks the grave that received the stilled brain and broken heart of George Canning. Ireland has given her Grattan, — his very name is an epitaph; Scotland, the Murray who, as Chief Justice, pronounced slavery a curse alien and abhorrent to the soil of Britain. They lie forever in state, these dead, — having in life done dutiful service to their country.



WILLIAM LLOYD GARRISON.

Very solemn is it to pass from the stir outside into the reverent and majestic stillness that keeps watch over the relics of these great citizens. Dim rays of violet and crimson, the changed shadows of the sunbeams without, steal through the painted window at the end of the transept, and fall in shifting radiance athwart the marble imagery that lends its adornment to the mansions of the dead. To stand by the tomb of Wilberforce in the mist of evening, when few people are present, is as though one rested at the very gate of peace. Or, if the time be that of public worship, and the mighty voice of the organ is lifted, the strains will seem an anthem rejoicing over what the DEAD MAN HAD DONE IN THE SERVICE OF HIS LORD.

Wilberforce left to his descendants, not the lustre of a title, but the more splendid inheritance of his genius and his virtues. Oxford reveres his son as among the best and most eloquent of her bishops; and his grandson, the Canon of Winchester, has, by numerous good works, approved himself worthy to bear the name of the Liberator, who found thousands slaves and left them free. "In the sign of the Cross" were the triumphs of that ancestor achieved, — the sign before which, even in America, the Dagon of slavery has now fallen prostrate, — the sign that still shines foremost wherever civilization is to be advanced, freedom striven for, or souls gained to God.

WILLIAM LLOYD GARRISON.

[Born 1804. Died 1879.]

THE benefactors of the world throughout all ages have had to struggle against indifference, conservatism, and self-interest. A purer vision has revealed to them truths which at present are unseen by others. A clearer insight into things, a keener sympathy, it may be, with sorrow and suffering, has opened to them depths to which no other eye had pierced.

The lofty soul is at once moved with compassion, and its whole being is stirred into action. The evil which has thus been opened up to this great heart is of man's doing and can be removed. And he pleads with men. He places higher motives before them and loftier aims. He points out to them objects of duty, and urges them forward to their attainment. With what result? To some he is an enthusiast who is asking for the impossible; to some he is a demagogue — an obstructionist, perhaps — who wishes to overthrow the grand institutions of ages; while to others — the makers of silver shrines, and so on — he is a troublesome agitator, who wishes to bring their country to ruin and desolation.

But this reception only increases his earnestness. It acts upon his spirit as a tonic, and he works on. Presently, one by one, men begin to be convinced, and gradually they rally round him, each one influencing his own circle, till, as time rolls on, the inspirations of one man have worked themselves into the minds of myriads, till the thing which was once impossible has at length come to pass; and this man — the enthusiast, the obstructionist, the demagogue, the despised of yesterday — is the loved and honored of to-day. It is often so. It was so with the subject of this sketch.

William Lloyd Garrison was born at Newburyport, Massachusetts, in the year 1804; and when seven years of age, in order to permit of his mother following the occupation of a sick-nurse, he was placed under the care of Ezekiel Bartlett, a rail-splitter by trade, and a deacon of the Newburyport Baptist Church. At the early age of eleven years his mother found it desirable that her son should begin work, and he was successively placed with a shoemaker and a cabinet-maker; but, neither of these occupations being at all to his mind, he was permitted to return to his former home till something more suitable should be found for him, assisting, in the meantime, the good old deacon in his trade of rail-splitting. At length, when thirteen years of age, it was discovered that an apprentice was wanted at the office of the "Newburyport Herald;" and thereupon, everything seeming favorable, he was duly articled to be taught the art and mystery of letterpress printing. His new occupation delighted him. Nothing in the world could have been better adapted to his taste. The mechanical part of the business was particularly attractive, and the general knowledge to be attained in the work of type-setting helped considerably to add to his happiness. His education hitherto had been only of the most elementary kind, and he had often wished for a wider range of books than were to be obtained at the deacon's. He was now able in great measure to gratify his thirst for knowledge, and sought every opportunity to improve his mind and to increase his general stock of information, assisting, among other things, in the formation of a debating society for the apprentices and youth of the neighborhood.

At the age of sixteen he commenced his literary career by contributing an anonymous article to the newspaper on which he was employed. The article was on a subject of local interest, was humorously written, and was signed "An Old Bachelor." Its favorable reception induced him to repeat the experiment; and from that time scarcely a week passed without a contribution either in poetry or prose from the unknown contributor "A. O. B." Garrison was over nineteen years of age when at length the authorship of the articles was discovered, and he was soon afterwards promoted to the post of assistant editor, the entire management of the printing-office being placed under his care. A series of articles on national affairs which he now contributed to the paper attracted considerable attention beyond the usual limits of its circulation, and were popularly attributed to one of the most distinguished statesmen of America.

During this time the young and rising apprentice had been in constant correspondence with his mother; and her letters, filled to overflowing with all the strong and loving sentiment of the noblest womanhood, inspired him to constant and heroic effort in his authorship and his daily work. Shortly before the termination of his apprenticeship she was seized with an illness which was considered likely to prove fatal; and young

Garrison made a journey of six hundred miles to see her, cheering and reviving her for a time, but only for a time; and a few weeks after his return she passed peacefully away.

In December, 1825, soon after the term of his apprenticeship had expired, William Lloyd Garrison left the service of Mr. Allen, and started the "Free Press." But the undertaking proved a failure; for although he did most of the mechanical work connected with it himself, setting up his editorials without even committing them to paper, he found his capital insufficient to continue the venture, and after a brief existence of six months the paper ceased to appear, and Garrison found himself in debt.

In order to retrieve his fortune he left Newburyport for Boston, and there engaged himself as a compositor on the "National Philanthropist," the first paper in the world which advocated the cause of total abstinence; and there, as a matter of principle, he joined the teetotal cause. It was not long before he received the appointment of editor of the paper; and it was while fulfilling this position that his attention became attracted to a subject which was destined to affect the whole course of his life, which was to hold him in its thraldom and nerve him to brave a world of foes, in order that he might free his fellow-countrymen from the inhuman bondage of slavery.

Benjamin Lundy, a member of the Society of Friends, was the first man in the United States to devote his life to the abolition of negro slavery. A newspaper, the "Genius of Universal Emancipation," published by him at Baltimore, came into the hands of Garrison, and awakened in him a keen sense of the degradation connected with this debasing traffic both to the slave and to the slave-owner, and he determined to consecrate his life henceforth to deliver the negro from the galling bonds of slavery.

His denunciations of slaveholding soon attracted general attention, and one of the first results was an offer from Benjamin Lundy himself to join him as joint editor of the "Genius of Universal Emancipation," which Garrison accepted.

Lundy had hitherto advocated "gradual emancipation;" but under the joint editorship the first number raised the standard of "immediateism," and, as might naturally be expected, a firmer tone pervaded the articles. The slave-owners now began to be alarmed. For the first time their favored institution seemed in imminent danger. Those who had hitherto favored Lundy's advocacy now drew back, and even in the Northern States the supporters of the paper fell off on all hands. The upholders of slavery determined to make an effort to crush the paper, and an opportunity soon presented itself. A merchant of Newburyport, whom Garrison had known in his youth, had laid himself open to very severe strictures in reference to the importation of slaves, and Garrison declared that he was deserving of imprisonment for life for his illegal practices. For this Garrison was indicted for libel, and, the judge and jury all being of pro-slavery principles, he was adjudged guilty, and a fine was imposed which he was unable to pay. He was thereupon incarcerated in Baltimore prison, occupying a cell which had recently been vacated by a prisoner who had paid the extreme penalty of the law, and was only released on the intervention of Mr. Arthur Tappan, of New York, who paid the fine.

While in prison Garrison wrote a graphic account of his mock trial, which was afterwards published and circulated throughout the length and breadth of the United States, and which did more in a couple of months to stir up an anti-slavery feeling than could otherwise have been accomplished in as many years. He also employed many hours in writing on the walls of his cell denunciations against slavery, and after the manner of Raleigh, when immured in the Tower, inscribing thereon words of comfort and consolation to any future occupant who might be thus wrongfully incarcerated. One of these noble effusions was as follows: —

"Prisoner! within these massive walls close pent,
Guiltless of horrid crime or trivial wrong,
Bear nobly up against thy punishment,
And in thy innocence be great and strong!
Perchance thy fault was love to all mankind,

Thou didst oppose some vile, oppressive law,
Or strive all human fetters to unbind,
Or wouldst not bear the implements of war.
What then! dost thou so soon repent the deed?
A martyr's crown is richer than a king's!
Think it an honor with thy Lord to bleed,
And glory midst the intensest sufferings!
Though beaten, imprisoned, put to open shame,
Time shall embalm and glorify thy name."

On his release from prison Garrison at once discovered that it would be quite impossible to carry on his paper under the altered circumstances. No one dared to be known as a supporter of it, and its subscribers dropped off on all hands. A building for the delivery of a course of lectures could not be obtained at any price. The religious bodies were no more favorable to his views than were others. So he left Benjamin Lundy and other friends at Baltimore, and went to Boston. But the same state of things prevailed at Boston. No one dared to support or countenance him in his noble and philanthropic crusade, and not a newspaper would assist him in propagating his views. At length, after much difficulty, the use of a hall was offered him, in which he delivered a course of lectures, proclaiming "liberty to the captive, and the opening of the prison doors to them that were bound."

In Boston Garrison met with an old acquaintance in the person of Isaac Knapp, a printer, and with his assistance he determined to start a newspaper of his own. The first number of the "Liberator" was published on the first day of January, 1831. It was a small, unpretentious-looking sheet, but it gave forth no uncertain sound.

"I am aware," said Garrison in this first issue, "that many object to the severity of my language; but is there not cause for such severity? I will be as harsh as truth and as uncompromising as justice. I am in earnest. I will not equivocate, I will not excuse, I will not retract a single inch, and *I will be heard.*" The first numbers were printed for him and paid for by his own and his friend Knapp's labor as compositors; but after a short time they were enabled to purchase some second-hand type and an old press, which they set up in a garret in the old Merchants' Hall. This one dingy room, which has been immortalized by James Russell Lowell, served as a printing-office, living-room, and bedroom for Garrison, his friend Knapp, and a small negro boy.

> "In a small chamber, friendless and unseen,
> Toiled o'er his types a poor unlearned young man.
> The place was dark, unfurnitured, and mean,
> Yet there the freedom of a race began."

So limited were the means of Garrison in the early days of this noble enterprise, that the diet of himself and his assistants was confined principally to bread and water, with now and then the luxury of a little milk.

The excitement and consternation caused by this little print, throughout the Southern States especially, was immense. Threats of the most deadly character and insults of every kind poured in upon Garrison by almost every post; and the Legislative Assembly of the State of Georgia was so lost to every sense of honor and humanity that it offered a reward of five thousand dollars for his head. Nothing, indeed, more clearly shows the brutalizing effect of slavery, and the necessity for its extinction, than the lawlessness and inhumanity which marked the efforts of those who opposed its fall.

Some time before this a society calling itself the American Colonization Society had come into existence, whose avowed object was to put an end to the foreign slave trade and of evangelizing Africa, but whose real purpose Garrison soon discovered to be the deportation of the free colored people, who were always a source of danger and annoyance in their midst. Garrison soon opened the eyes of the philanthropists of America to the self-seeking designs of this society; and, it having sent an emissary to England for the furtherance of its object there, he determined to follow and unmask the villanous imposture to the people of that country. He arrived in England in May, 1833; and having explained his mission in several public meetings and before some of the greatest English statesmen and philanthropists of that day, he was enabled to return to his own country in possession of a strong and emphatic protest against the aims of the society, signed by Fowell Buxton, Wilberforce, Macaulay, and others.[1]

On his return to the United States Garrison found that the news of his success had preceded him; and at New York, where his friends had arranged to hold a meeting at which he was to be present, the friends of the slave-owners had issued placards announcing that the "infamous Garrison" had arrived and would be present at a meeting; and the "friends of order" — that is, the friends of slavery — were exhorted "to assemble and hurry him to the tar-kettle." When the hour of the meeting arrived the hall was surrounded by a mob of several thousand excited and infuriated "friends of order," eager to wreak their vengeance on a man whom a few years later they were just as eager to bless.

The excitement among the friends of the slave-owners produced a corresponding enthusiasm in the ranks of the abolitionists; and a grand national convention of the friends of emancipation was held at Philadelphia, which resulted in the formation of the American Anti-Slavery Society, and a declaration of its principles, drawn up by Garrison, was published far and wide throughout the free States.[2]

In the autumn of 1834 Garrison was joined by George Thompson, whose acquaintance he had made while visiting England, and whose powerful oratory had impressed him with the advantages of such a helper. And if the plain solid statements of Garrison — for there were no outbursts of oratory in Garrison's speeches — could produce such inflammatory results, it could only be expected that the withering sarcasms and witty shafts of Thompson must add fuel to the flame. It did so; and for many months it was not safe for Thompson to be seen unless well escorted. Meetings were held only with the greatest difficulty, and were attended with tremendous risks. One morning in September, 1835, a gallows with two ropes suspended was found erected in front of Garrison's door, one rope being intended for him and the other for George Thompson.

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[1] In reference to this society, it may be as well to state that, although projected by slave-owners and their friends for their own selfish ends, as herein explained, it was the means of founding the colony of Liberia.

[2] Turn to the article on Harriet B. Stowe for the effects of this convention.

Soon after this there occurred that memorable outrage in which William Lloyd Garrison escaped with his life only by a miracle. A meeting was to be held in connection with the Ladies' Anti-Slavery Society, and George Thompson was expected to be present. A mob of upwards of five thousand "gentlemen of property and standing" presented themselves at the hall. Only thirty ladies were able to gain admittance, and some of them only by undergoing the most rude and brutal treatment from this well-dressed mob. The meeting was scarcely opened when the mayor entered in a state of great excitement, begging the ladies to adjourn their meeting, as he found it impossible to disperse the mob, — a request which was at once complied with. Garrison had attended for the purpose of escorting his young wife, but with no intention of taking any part in the meeting. Thompson was not present; and the mob, being disappointed in not finding him, fixed upon Garrison. The cry was raised of "Out with him! Lynch him!" A room was burst open in which he had taken refuge, and at first it seemed that he would have been thrown out of the window; but at the suggestion of one of the mob that he should not be killed outright, a rope was fastened round his body, and he was hustled out into the street, where he was hurried along towards the tar-kettle, which was preparing in a neighboring street. Brickbats and stones were thrown at him, and his clothes were gradually torn piece by piece from off his body. Suddenly some one in the crowd cried out, "Remember he is an American! He shall not be hurt!" "No," responded several voices; "he shall not be hurt!" and for a moment or two gentler counsels seemed to prevail. But only for a moment. He was again pounced upon, his clothes by this time being torn completely from off his body, and every moment seemed as though it would decide his fate, — all this time his face bearing an expression of gentleness and benevolence. He was at length — doubtless by the most humane of the mob — conducted to the office of the mayor, where by the kindness of several gentlemen he was re-clothed. The mayor, in order to save him from further violence, ordered him to be conveyed to prison, where on the walls of his cell he inscribed the following words: "William Lloyd Garrison was put into this cell on Monday afternoon, October 21, 1835, to save him from the violence of a respectable mob, who sought to destroy him for preaching the abominable and dangerous doctrine that all men are created equal, and that all oppression is odious in the sight of God."

"The truth that we utter," he afterwards wrote, in reviewing this transaction, "is impalpable, yet real. It cannot be thrust down by brute force, nor pierced with a dagger, nor bribed with gold, nor overcome by the application of a coat of tar and feathers."

Garrison had been an early friend of the poet Whittier, and had encouraged his first efforts in poetic composition. Whittier requited this friendship in his memorable apostrophe to the great emancipator, which concludes as follows: —

"Go on, — the dagger's point may glare
    Amid thy pathway's gloom, —
The fate which sternly threatens there
    Is glorious martyrdom!
Then onward with a martyr's zeal;
    And wait thy sure reward
When man to man no more shall kneel,
    And God alone be Lord!

For years the advocacy of emancipation was continued amidst the greatest obstacles, with now and again scenes of violence only a little less atrocious than those we have recorded, till at length the majority of people in the Northern States were found to approve of anti-slavery principles. It was then that the slave-owners, finding the Northern States against them, began to talk of secession. And when this event at length took place, and the Civil War was entered upon, the liberation of the slaves seemed to many farther off than ever. When at length, on the first day of January, 1863, — that being also the thirty-second anniversary of the first issue of the

"Liberator," — by the proclamation of President Lincoln, negro slavery ceased to exist throughout the United States of America, no man could have been more amazed at the wonderful course events had taken than he whose life had been spent in so educating the people as to make such a proclamation possible.

William Lloyd Garrison was intensely a man of peace. He had always condemned physical violence, and would never allow it to be resorted to on his behalf. He would have left nothing undone to have liberated the slaves without it; but the slaveholders themselves ruled that such was not to be.

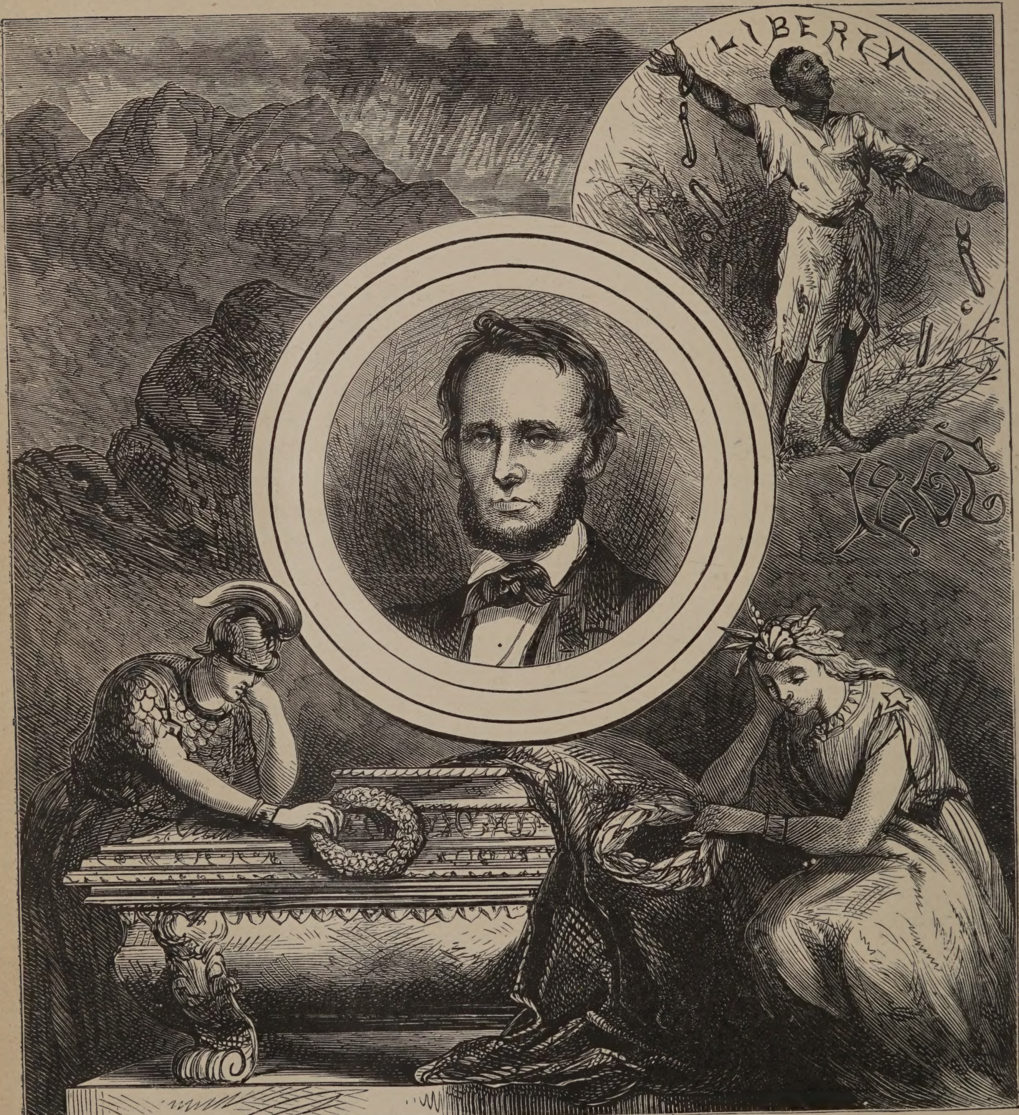
Soon after the close of the war Garrison made a tour through some of the Southern States; and on more than one occasion he had the inexpressible pleasure of addressing large audiences from the auction block, never more to be desecrated again for the vile purposes of slavery.

In the year 1867 he again visited England, and at a public breakfast given in his honor at St. James's Hall, at which were present the late venerable Earl Russell, J. Stuart Mill, John Bright, and other leading statesmen and philanthropists, he made use of these words: "I have been here three times before on anti-slavery missions, and wherever I travelled I was always exultingly told, 'Slaves cannot breathe in England!' Now I am at liberty to say, and I came over with the purpose to say it, 'Slaves cannot breathe in America!' And so England and America stand side by side in the cause of negro emancipation; and side by side may they stand in all that is noble and good, leading the way gloriously in the world's redemption."

The last few years of this great and good man's life were spent in well-earned ease and repose. In 1868 his friends raised for him a national testimonial of $30,000. Yet he continued to take a lively interest in all the vital questions of the day, giving expression to his opinions from time to time, both from the platform and the press. In the summer of 1878 he again visited England, in the hope that the change might recruit his failing strength; but it does not seem to have produced any lasting benefit.

He was of a most gentle and lovable disposition, forgiving and forbearing even to those who were seeking his life, and was able to say, "Even while the Southern slaveholders were seeking my destruction, I never for a moment entertained any other feeling towards them than an earnest desire under God to deliver them from an awful curse and a deadly sin." Such was the mild and benignant expression of his countenance that it has been said that a stranger seeing his portrait exposed for sale in a shop window purchased it, as the most benevolent and apostolic face he had ever seen. Nothing is more certain than that agitation was against every instinct of his nature; and it was only his great love for humanity and indignation against tyranny and oppression that nerved him to his self-imposed task. On the 24th of May, 1879, he departed full of years, honored and loved by his countrymen of every race and color, and leaving behind him one of the grandest examples of heroic courage, steadfastness to principles, and unflinching zeal in a noble and benevolent cause, ever recorded.

His funeral was indeed a remarkable scene. The venerable poet Whittier, besides many of the most distinguished of the dead philanthropists, co-workers in the same cause, stood around the bier. Wendell Phillips surpassed himself. Looking into the coffin in which all that was mortal of William Lloyd Garrison was lying, the great orator exclaimed, "Farewell for a little while, noblest of Christian men!" Certainly no single life affords a higher example of the mighty power of the right to gain the victory over the wrong, than this most loyal and steadfast one has left us.



ABRAHAM LINCOLN.

ABRAHAM LINCOLN.

[Born 1809. Died 1865.]

THE eminent man whose career forms our present study appears in a singular variety of interesting situations. He literally filled many parts, from rail-splitter, pilot, postmaster, to legislator, and finally President of the United States. In the old-world countries, particularly in England, such possibilities, how common soever in the past, are most rare, and year by year are becoming rarer; such transformations in their first aspect seem like a page from "Gil Blas." In young America they occur constantly. As an instance of splendid but not ignoble "rising in the world," or what we somewhat loosely call self-help; as an able ruler and a pure patriot; as a philanthropist, emancipating millions of slaves, — in these public characters, not to mention the solid virtues and humanizing, kindly charms of his private life, the "Martyred President" is a figure great and notable.

Before proceeding with the main incidents of President Lincoln's life, we will advert, in brief, to the origin and progress of slavery in America. The English slave-trade began with Sir John Hawkins in 1562. He had obtained leave from Queen Elizabeth to carry Africans to America with their own free consent; but he forced them on board his ships, not without slaughter, and escaped without punishment; nay, a few years later, he received high honor from the Queen. When Virginia attained a fixed condition as a colony — about 1615, when fifty acres of land were assigned to every emigrant and his heirs — the cultivation of tobacco instantly followed. Five years later, a Dutch ship brought a cargo of negroes from the coast of Africa, whom the Virginians joyfully received as slaves. But slavery had no legal sanction. Once introduced, it became chronic;

children and grandchildren were born in slavery. In 1645, when slaves were brought to Boston, the magistracy committed the sellers to prison, sharply denounced their crime, and ordered the slaves to be sent home at the public expense. Negro slavery became, however, domesticated in all the American colonies, nor did it wholly cease in the northern section until after the Revolutionary War. At the era of American Independence South Carolina and Georgia were the chief slaveholding communities. Through the immense impulse given to cotton culture in the South[1] the number of slaves was nearly doubled in twenty years, — from 1790 to 1810, — going from about 700,000 to 1,200,000 souls. At length, in 1808, Congress forbade the importation of Africans. By cutting off this source of supply the increase was limited to what slaves were bred within the States themselves; and in forty years more (1860), the period of the Civil War, the whole number of slaves was only a little more than 4,000,000. But the political complications arising from the nation having gradually become half slave and half free were assuming the gravest character; and the rupture between the sections came at last exactly where it had begun to foreshadow itself seventy-three years earlier, namely, upon the question of introducing slavery into the free territory of the Union. The sagacious framers of the Constitution did not desire this; and in the celebrated Ordinance of 1787, framed for the government of the unorganized territories, slavery was expressly forbidden. Then, in 1803, came the acquisition of Louisiana with its slaveholding population. Then, in 1820, the Missouri Compromise, allowing slavery in Missouri, but prohibiting it north of the since famous geographical limit of 36° 30′. Then came the contest over the admission of Texas with a constitution providing for a similar division into slave and free territory; then over California, which indeed came into the Union free, but simultaneously with the enactment by Congress of the iniquitous Fugitive Slave Law, by which slaves escaping into free States could be seized wherever found and sent back into slavery. Ever since the Mexican War had been waged for the extension of slavery (an end accomplished by the admission of Texas), public sentiment at the North had been consolidating upon the dictum "No more slave territory." The Fugitive Slave Act still further solidified this feeling. The rendition of slaves was resisted; and presently the people, whom respect for the Constitution of the nation had so long held back, began to form a political party under the ominous name of "Free Soil." Events then hastened on. When, in 1854, the provisions of the Missouri Compromise were repealed, the end was ominously near. Again the South demanded the admission of Kansas as a slave State. A struggle began within the borders of this territory, which culminated in the admission of Kansas as a free State, and in the election of a "Free Soil," or "Republican," president. The South, seeing its prestige in the nation gone, then determined upon secession. Abraham Lincoln was the president who had been chosen, and who was now confronted by the gravest crisis that had occurred in the nation's history. Fortunate, indeed, was it for the American Republic that, under God, the people had made choice of this man to stand at the helm of State! We will now review the career of Lincoln.

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[1] See our article on Eli Whitney.

Abraham Lincoln, sixteenth President of the United States, was born at Hardin or Larue, in Kentucky, Feb. 12, 1809. His ancestors, who were for some generations Quakers, belonged to Virginia and to Kentucky. His father, Thomas Lincoln of Virginia, was twice married, — first in 1806 to Nancy Hanks, the mother of Abraham, and afterwards, in 1819, to a widow and old neighbor named Johnston. With the stepmother Abraham always maintained the kindest relations. In 1816 the family removed to what is now Spencer County, Indiana, settling in the forest. Abraham worked with his father in clearing up the new farm, being unusually vigorous for his age. His mother could read, but not write; his father could do neither; but young Abraham received one year of the most meagre schooling, which was all that he ever enjoyed. Still the mother's influence may be guessed from Lincoln's remark when President: "All that I am, all that I hope to be, I owe to my sainted mother." He grew up in the land of free labor in a log cabin, passing, nevertheless, meditative and fruitful hours in that solitude which, as Gibbon finely says, is the school of genius. He became expert at figures. His books were few: "Æsop's Fables," the Bible, the "Pilgrim's Progress," "Burns's Poems," "Robinson Crusoe," and a "Life of Washington" are named, together with the "Revised Statutes of Indiana." It was his custom to keep a note-book, in which to jot down his favorite passages. In after years he exhibited a large share of native and incommunicable eloquence, — as conspicuously in the oration pronounced over the men who had fallen at Gettysburg, — but his choice and collocation of words, terse, pithy, idiomatic, must have been greatly moulded by the chances of this early reading. The Latin element in the language, if predominant, is pompous, as in Johnson; the mixture of Latin and English derivatives, as in De Quincey, is English at its best; the Saxon (so called), as in Defoe or the Bible, is the general dialect of home, of direct address, of popular appeal, — as we find it in Mr. Bright or Mr. Spurgeon, and largely, we believe, in Lincoln. His education, using the word in its strictest sense of training, was, as George Bancroft puts it, "thoroughly American;" and he could have found it in no other country on the earth.

In 1825 he was employed, at six dollars a month, to manage a ferry across the Ohio. He was famous as a story-teller, as an amateur orator, and for a certain ability in playful doggerel satire, and in addition for his skill as a wrestler. He was six feet four inches high. In 1828 he went to New Orleans as "bow hand" on a flatboat with a cargo of produce. In 1830 the family moved to Illinois, clearing there fifteen acres of land, for the fencing of which Abraham memorably split the rails. In 1831, aided by his half-brother and brother-in-law, he built a flatboat and navigated it to New Orleans, rescued the boat and cargo from grave peril, and afterwards obtained a patent for "an improved method of lifting vessels over shoals." On this trip Lincoln for the first time at New Orleans saw slaves chained and scourged, — a spectacle which powerfully intensified his detestation of slavery.

In 1832 we find Lincoln clerk in a store till the bankruptcy of his employer; pilot of the first steamboat on the Sangamon; captain of volunteers in the "Black Hawk" war. Then he kept a store and was postmaster of New Salem. His partner proved a drunkard, and died; the firm failed, but Lincoln — and this is certainly noteworthy — paid the debts, discharging the last one so many years afterwards as 1849. In 1834 he set up as surveyor, but his instruments were sold under a sheriff's execution. Truly, if ever any man was "Jack of all trades," Lincoln was that one; and generally he contrived to get along quite comfortably and creditably. Strictly speaking, perhaps, he was not a man of genius, though possessing a pronounced individuality; but he had wonderful ability, he had versatility and tact; he had the infinite opportunities of a new and not over-populated country, — room to breathe in; and he also had a splendid physical constitution. He was a notable wrestler in every way. At twenty-five he took a "new departure." He was elected to the Legislature of Illinois, where he served eight years. Meanwhile, according to Bancroft, he had not gone deeply into literature, adding to his Defoe and Bunyan "nothing but Shakspeare's plays." Clearly he had no time whatever to spare; yet for all, particularly for a public man, the lack of literature must be held a serious drawback. But Shakspeare, intelligently read, implies a good deal; and when to this is added Lincoln's great familiarity with, and partiality for the Bible, he must be held to have laid an unsurpassed foundation.

In 1837, being aged twenty-seven, he was admitted to the bar, and opened an office at Springfield, where he soon became noted for his ability in jury trials. In November, 1842, he married Mary, daughter of the Hon. Robert S. Todd, of Lexington, Kentucky. In 1846 he was elected to Congress by a majority of fifteen hundred, his competitor on the Democratic ticket (i. e. the Southern and pro-slavery side) being the Rev. Peter Cartwright. In this Congress Lincoln was the only "Whig" candidate from Illinois. He vigorously opposed the administration of President Polk, denouncing the war with Mexico as unjust. When the President declared that the Mexicans "had invaded our territory and shed the blood of our citizens on our own soil," Lincoln introduced the famous "spot" resolutions, asking the President to name the place where the alleged outrage had been committed. It was a clever and characteristic way of bursting a rhetorical bubble. Thus, on his first appearance on the stage of the national Congress, did Lincoln stand forth for reason and humanity.

In Congress, moreover, in 1849, he introduced a bill for abolishing slavery in the District of Columbia; he voted for the reception of antislavery petitions; he voted nearly forty times in favor of the principle of the famous Jefferson proviso. He declined to become a candidate for re-election. In 1849, again he sought eagerly but unsuccessfully the place of Commissioner of the Land Office, and he refused an appointment that would have transferred his residence to Oregon. In July, 1852, he delivered at Springfield a eulogy on Henry Clay. He became the acknowledged leader of his party in Illinois. In 1858, as the rival of Douglas at Springfield, he significantly declared: "This Union cannot permanently endure, half slave and half free; the Union will not be dissolved, but the house will cease to be divided," — a happy prediction, which he powerfully aided to accomplish. He also declared with equal force: "I am impliedly, if not expressly, pledged to a belief in the right and duty of Congress to prohibit slavery in all the United States territories." Finally, in May, 1860, the Republican National Convention, sitting at Chicago, nominated him for the Presidency. He was opposed in the Democratic and slavery interest by his old rival Douglas, who, in the heated contest that ensued, had taunted Lincoln with his lowly origin and occupations, — taunts met with humorous rejoinders and keen exposures of sophistry. After a bitter contest Lincoln was elected President; and it is certainly instructive to know that, of all the four candidates, Douglas found himself last, — for it was Douglas who had carried through Congress, against vehement opposition, the repeal of the Missouri Compromise.

Very incensed were the slavery men. At Harrisburg, on his way to Washington, Lincoln was informed of a plot to assassinate him on his passage through Baltimore, and at the earnest solicitation of his friends he journeyed by an earlier train and during the night. He was inaugurated as President, March 4, 1860. Already seven States had formally seceded from the Union; ultimately four more followed them. These seven States sent commissioners to negotiate concerning the difficulties; but Mr. Seward, the Secretary of State, by direction of Lincoln, declined to receive them. It was not admitted that they had any right whatever to withdraw from the Union otherwise than "with the consent and concert of the people of the United States, to be given through a national convention." Soon came the bombardment of Fort Sumter, which precipitated the war between North and South.

Into the details of that struggle we need not enter. They belong to the historian and annalist, not to the writer of a biographical sketch. The President, with firmness, resisted the well-meant but somewhat intrusive efforts at mediation projected by England in concert with France. The business of the blockade and the "Alabama," and the seizure of the commissioners, Mason and Slidell, from the "Trent," created stir and annoyance enough in England at the time. Happily, however, Englishmen were divided during the progress of the war; and there are now none of any party who regret its grand result, the extinction of slavery, — that "execrable sum of all villanies," as the venerable Wesley described it. Lincoln ever viewed it as such, if occasionally he placed the stability of the Union first and the fall of slavery second in his regards. Great firmness and dignity, too, were shown in the refusal to recognize the empire of Maximilian in Mexico.

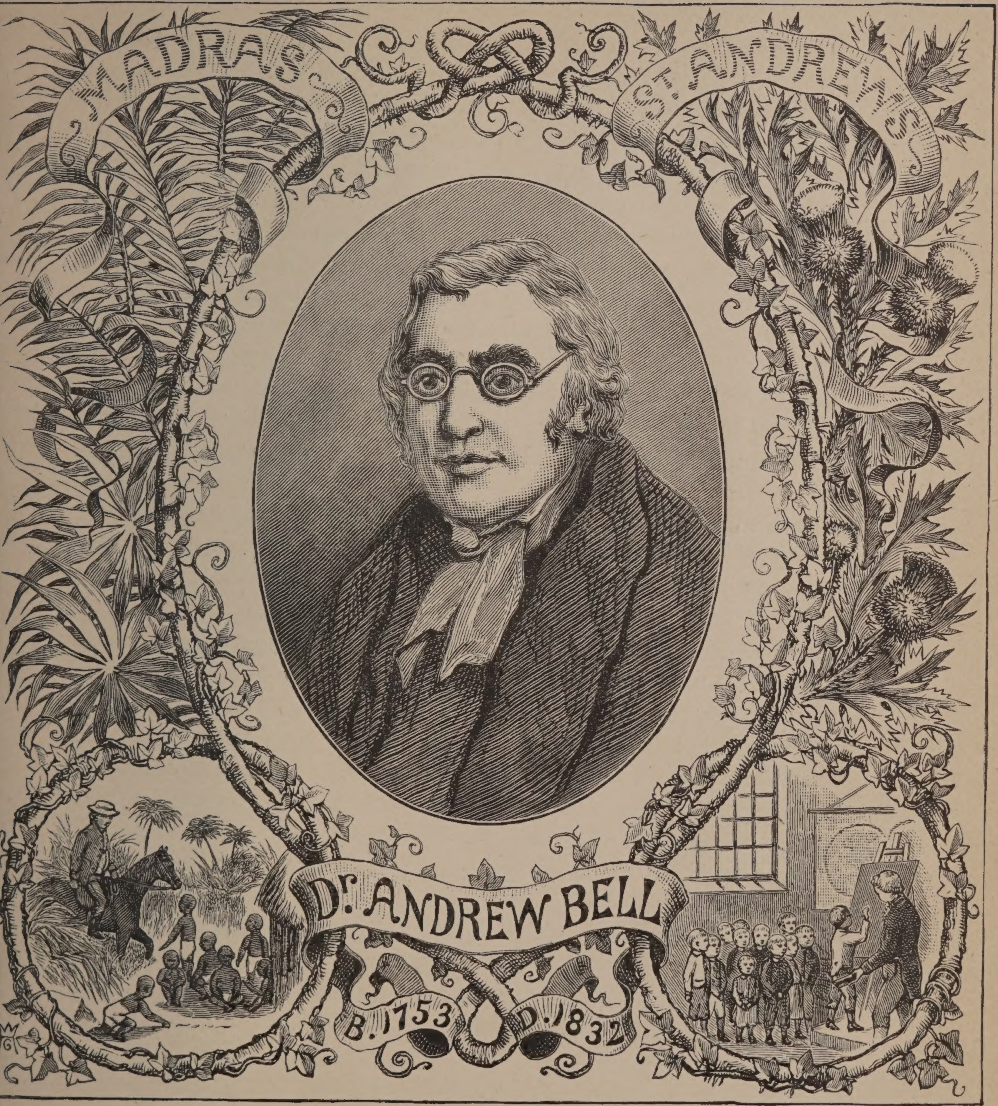
In October, 1864, Lincoln for the second time was elected President. "With malice towards none, with charity for all, with firmness in the right as God gives us to see the right, let us finish the work we are in, to bind up the nation's wounds," — such was the language of his address. His work, indeed, already neared its completion. He visited the army, remained with it till the fall of Richmond, then suddenly was recalled to Washington by tidings of an accident to Secretary Seward. On the evening of Good Friday he visited Ford's Theatre, accompanied by Mrs. Lincoln and a few friends. Shortly after ten an obscure actor, John Wilkes Booth, entered the box, having first barred the passage, approached the President from behind, put a pistol to his head and fired, exclaiming, "Sic semper tyrannis; the South is avenged." Lincoln's head fell forward, his eyes closed, and he never regained consciousness, dying on the following morning. His body was embalmed, lay in state in the Capitol and in various cities, and the interment took place at Springfield, May 4, 1865.

Lincoln, in the eloquent words of Bancroft, "finished a work which all time cannot overthrow. . . . He was followed by the sorrow of his country to his resting-place in the heart of the Mississippi Valley, to be remembered through all time by his countrymen, and by all the peoples of the world." To him, too, applies aptly the eulogy pronounced by the historian of the Roman Republic, Dr. Adam Ferguson, on Cato of Utica, who "was naturally warm and affectionate in his temper; comprehensive, impartial, and strongly possessed with the love of mankind. In his conduct he probably became independent of passion of any sort, and chose what was just on its own account." Altogether, Lincoln may justly claim high place, not only as an American patriot, but as a benefactor of mankind. His name is enshrined in the hearts of the freedmen as that of their predestined deliverer out of bondage.

ANDREW BELL.

[Born 1753. Died 1832.]

THE Madras system of education, which at the beginning of the present century was the great subject of discussion among educators, was a real novelty, but it was achievable,—it had been tested by facts. Its success was manifest; and what



ANDREW BELL.

chiefly strengthened its claim on public attention was the readiness with which its results could be obtained by all who followed the precepts of the inventor. Pestalozzi had declared that "anybody could teach anything," and Jacotot had put forth the astounding paradox that anybody can teach, and, moreover, can teach that which he does not know! But the great drawback to each of these latter systems was the fact that the inventor's personal enthusiasm was the main secret of success. Others tried them, and tried in vain. One by one almost all the various Pestalozzian institutions have given way to other establishments, while the trick of Jacotot, so plausible in his own hands, is now almost forgotten. Dr. Bell, more reasonably and practically, professed to show a plan by which a school under the superintendence of a master should *teach itself*.

Andrew Bell was born at St. Andrews, Scotland, in 1753, and was educated at the ancient university of that city. Early in life he went out to America, but after a short stay returned, and took orders in the Scottish Episcopal Church. His first appointment was to a curacy at Leith. The work, however, disappointed him, and in 1787 he sailed for India. His intention was to devote himself to lecturing on natural philosophy and other scientific subjects, for which his university education had fully qualified him. On his arrival at Madras he met with great encouragement, to use his own words, — "in the line of the Church." Among other offices to which he was appointed was that of chaplain to the garrison, and here it was that he first displayed his inventive genius in the way of education. Some time before his arrival a school for educating the orphan children of European soldiers had been established at Madras, and to Dr. Bell, as chaplain, was intrusted its superintendence and management. For this work a good salary was offered him; but payment he entirely declined, considering that instruction to the young was one of the duties of his office as a clergyman. His difficulties on commencing the task were immense. The children were half-caste, of the weakest possible grade in moral and intellectual faculties, and thus calculated to try to the utmost the patience of the keenly intellectual and restless-minded Scotchman; while the teachers were obstinate, and so much oppressed by the lethargy incident to a tropical climate that they refused to carry out the plans he proposed. The position was one which demanded the utmost tact and knowledge of human character; and yet, with possession of both these uncommon qualifications, Dr. Bell was on the point of failure. Thinking over the apparently insuperable difficulties by which he was beset, he happened during a morning ride to pass by a Malabar school, when he noticed the children seated on the ground writing in the sand with their fingers. He hastened home, repeating the idea of Archimedes, "I have it now," and gave immediate orders to the teachers of the lowest classes to teach the alphabet in the same manner, in sand strewn upon a board. With apparent readiness, but real disinclination, the plan was tried. But to the doctor's surprise it utterly failed, and upon being pressed to renew their efforts the masters refused point blank, declaring the thing to be impossible. So, despairing of help from his assistant masters, he bethought himself of employing a child on whose fidelity and skill he could rely to teach the alphabet class in the manner he had suggested. Perhaps it may not be out of place to record the name of this first monitor in the system so famous in the annals of elementary education. He was called John Frisken. He was the son of a soldier, and at the time of his appointment only eight years old. The doctor gave him such instructions as he deemed necessary, and told him that he should hold him answerable for success. And success followed. This mere child effected without difficulty what the class-master had declared to be impossible. Young as he was, he was appointed permanent teacher of the class, and Dr. Bell placed other boys as assistants in the lower classes, giving to Frisken the superintendence of the whole. The same rapid progress and the same brilliant success attended this second experiment. The result was decisive, and by degrees the delighted chaplain applied his monitorial method to the whole school. Masters, such as they had been, were converted into overseers rather than teachers, the first principles of what afterwards developed into the pupil-teacher scheme were established, and Dr. Bell became the founder of the so-called "Madras," or monitorial, system of education.

This was in 1791. Three years afterwards, Dr. Bell wrote to a friend: "The school promises fair to present me with the sole reward I have sought of all my labors with my young pupils, by giving to society an annual crop of good and useful subjects, many of them rescued from the lowest state of depravity and wretchedness." As to acquirements, the boys very soon surpassed their former masters, gaining sound instruction in arithmetic, book-keeping, grammar, geography, geometry, mensuration, navigation, and astronomy, — a pretty fair curriculum for boys of the "weakest possible grade in moral and intellectual faculties."

On learning the success of Bell's experiment, persons interested in education in Europe applied to him for advice or suggestions. Among the rest Mr. Edgeworth, the well-known writer on education, applied to him for advice with regard to the proper selection of books for instruction. Dr. Bell replied that he could not recommend books to a man who had read so much, adding, "There is only one book which I take the liberty to recommend. It is a book in which I have learned all I have taught, and infinitely more, — a book open to all alike and level to every capacity, which only requires time, patience, and perseverance, with a dash of enthusiasm, in the perusal, — I mean *a school full of children*."

The immediate effect upon the pupils themselves of the Madras Orphan Asylum was an eager demand for them to fill important situations. The school became not only popular but famous, and the Government took measures for extending its system of teaching to the other Presidencies. Meantime, as the doctor's health had begun to suffer from the effects of the climate, he made arrangements for returning to Europe. On his arrival in England he was appointed to the rectory of Swanage, in Dorset, and at once devoted himself to the formation of Sunday-schools on the Madras plan. He was again opposed, as he had been in India, by those who should have been his best helpers, and it was only by dint of the most determined perseverance that he overcame the difficulties thrown in his way. His system certainly obtained an introduction into several towns, but it was worked only in a languid manner. The usual fate of personal methods seemed destined to attach itself to this also. Fortunately, however, for its vitality, a rival system, supposed by many to be identical with his own, brought the Anglo-Indian educationist prominently before the public. Controversy began, and the respective claims of the Madras and of the Lancaster systems were warmly urged by their excited partisans. Dr. Bell's own opinion of Lancaster is expressed in a letter to Mrs. Trimmer, — a lady who had some fame at the time as a compiler of school-books, and whose well-meant but somewhat unpractical epitomes were then great favorites in ladies' boarding-schools. With considerably more zeal than discretion, this lady had called the doctor's attention to what she characterized as schismatic endeavors on the part of Lancaster to overturn the Established Church, and to rob the inventor of the new method of education of his influence by "building on his foundation." "Ever since I conversed with him," writes Dr. Bell, "and read some of his familiar letters, I have suspected that he has much assistance in his published works of every kind. He is illiterate and ignorant, with a brazen front, consummate assurance, and the most artful and plausible address, not without ability and ingenuity, heightened in its effects under the Quaker guise." At the same time he gives his rival credit for much originality both in the applying and improving of the Madras system. "No one," says his biographer, Mr. Southey, "could have been more liberal than Dr. Bell was in acknowledging Lancaster's merits. . . . His zeal, ingenuity, and perseverance deserved high praise, and this they obtained." However disposed the inventor of the new system might be to rest content with his clerical duties, the indefatigable Mrs. Trimmer would not permit him. At length, not only he, but the whole Church party, was fairly aroused, and Church and chapel ranked themselves as antagonists in the monitorial war. Sermons were preached, public meetings were held, pamphlets were published; even caricatures of the rival educationists embellished the current literature. Southey, Coleridge, and the "Quarterly" thundered down on Lancaster, while Brougham, Sydney Smith, and the "Edinburgh" flashed equal denunciations on the innovator and imputed plagiarist from Madras. In point of fact, Lancaster acknowledged himself indebted for many important suggestions to Dr. Bell, but at the same time claimed the monitorial idea as an independent invention of his own. Much might be said in favor of the persevering young Quaker and his improvements on Bell's idea. The great value of the controversy of 1805-6 to the community was that it brought the question of education to the front, and gave it an importance which hitherto it had not attained.

In 1811 a society for establishing schools on the Madras system in connection with the Established Church was founded, and called the National Society. This was the beginning of English National schools. From the date of their foundation until Dr. Bell's death his career is inseparably associated with their progress. He devoted himself entirely to the work, laboring with unwearied zeal to promote the welfare of the society, and, after prodigious exertions, had the satisfaction of seeing his system adopted not only in the United Kingdom, but even in America. He also endeavored to introduce it on the Continent of Europe, and travelled much with that view. But in this attempt he was not successful, as Pestalozzi and Fellenberg were already in possession of the field. In the course of his labors as clergyman, school-manager, and inspector, Dr. Bell by no means trenched upon a narrow purse. On the contrary, he realized a very handsome fortune. The sum of £120,000, which he had made out of the various offices he had held, was bequeathed at his death in endowments for various schools, nearly one half being given to his own University of St. Andrews towards the Madras College, of which he was the founder. He died at Cheltenham on the 27th of January, 1832, and was buried in Westminster Abbey.

JOSEPH LANCASTER.

[Born 1778. Died 1838.]

IN our notice of the life and educational labors of Dr. Andrew Bell we were under the necessity of making some allusion to the young man whom Dr. Bell's friends insisted upon denouncing as a plagiarist and a rival. And seen from the point of view taken by the supporters of the Madras scheme of education, there certainly seemed some ground for complaint. It now becomes our duty to examine this side of the question, to see what explanation could be offered for the seeming rivalry, and whether Joseph Lancaster had not sufficient excuse for considering himself, if not an inventor, at least a great improver upon a system which offered so many advantages both to master and pupil in the theory and practice of education. It is certainly a fact that whether his theories were original or not, Lancaster devoted himself to the practical development of the views he held quite as completely and as enthusiastically as his more learned predecessor. It is also a fact that Lancaster claimed as his own meritorious idea, that by his methods "one master could teach a thousand boys." If a personal contrast were drawn between the two men as to character, manners, and temperament, it is much to be feared that Lancaster would suffer. If it be said that Bell was prudent, deliberate, quiet, and that Lancaster was excitable, impetuous, and improvident, the charge must certainly be admitted. One might briefly sum up such differences by saying that Bell was a Scotchman, Lancaster was not. For it may be singular, but it is notorious, that a man born north of the Tweed appears to be constitutionally more prudent, cautious, and, as a rule, successful in worldly matters than one who enters life on the other side of that historic but shallow estuary.

A.S.BARNARD Sc.

JOSEPH LANCASTER.

Joseph Lancaster, the founder of the Lancasterian, or British School, system of education, was born in Southwark in 1778. He was the son of a pious soldier, who had fought under the British flag in America, and had earned retirement and a pension. Early impressed by the seriousness of his father's character, and inheriting a similarity of temperament, he very soon showed an eager desire to devote himself to the active service of God. This youthful enthusiasm showed itself in an attempt, after reading Clarkson's "Essay on the Slave Trade," to go off to Jamaica and become a Scripture reader to the poor negroes. He was discovered by the captain of a West Indian ship in which he had secreted himself with a Bible and "Pilgrim's Progress" in his pocket, and of course sent back to his parents. But this ignominious failure did not discourage him. At sixteen years of age he determined to begin life for himself as a school assistant, and after some little experience in that capacity his impulsive character urged him to a still more onerous and responsible task, — that of teaching poor children, whose parents could pay little or nothing for the advantages of school, without insisting on remuneration.

At the time when he formed this resolution there was a class of elementary schools in existence known as the dame-school. This institution, better known, it must be confessed, through Shenstone's pathetic little poem of the "Schoolmistress," or through Crabbe's "Borough," than through Lancaster's pamphlet, is thus referred to in his first published tract on his favorite topic: "They are frequented by boys and girls indiscriminately, few of them being over seven years of age. The mistress is frequently the wife of some mechanic, induced to undertake the task from a desire to increase a scanty income or to add to her domestic comforts." We confess that we do not see any great crime in motives thus candidly set forth. It is certain that persons can be found whose motives are neither better nor worse, but whose methods of supporting those motives are by no means so innocent or useful.

But to proceed: "The subjects of tuition are reading and needlework; the number of children is very fluctuating, and seldom exceeds thirty. The pay is very uncertain. Disorder and noise seem more the characteristics of these schools than improvement of any kind. Many poor children go at once from these schools to work, and have no other opportunities of instruction."

With a firm conviction of the uselessness, or worse than uselessness, of a system of education like this, and an enthusiastic desire to be eminently useful in promoting a better state of things, Lancaster, in 1798, opened a school in his father's house, — a modest building nearly opposite the present Training College in the Borough Road. Here he undertook to teach what he considered the essentials of knowledge — reading, writing, arithmetic, and the Holy Scriptures — for fourpence a week. At the same time he placed over his door the following singular notice: "All that will may send their children and have them educated freely; and those who do not wish to have education for nothing may pay for it if they please."

The author of this very unusual announcement was then just twenty years of age, and possessed of no other knowledge either of methods or subjects than was to be found in the schools of which he complained so bitterly. Of second-grade schools he had no better an opinion than of the dame-schools. "The masters of these schools," he writes in the pamphlet just referred to, "are generally the refuse of superior schools, and too often of society at large. The pay and number of scholars are alike low and fluctuating. Of course there is little encouragement for steady men, either to engage or continue in this line; it being impossible to keep school, defray its expenses, and do the children regular justice without a regular income. Eventually many schools, respectable in better times, are abandoned to men of any character, who use as much chicane to fill their pockets as the most despicable pettifogger. Writing-books are scribbled through, whole pages filled with scrawls, to hasten the demand for new books. These schools are chiefly attended by the children of artificers, whose pay fluctuates with their employ, and is sometimes withheld by bad principals. Debts are often contracted that do not exceed a few shillings; then the parents remove their children from school and never pay it, the smallness of the sum proving an effectual bar to its recovery, the trouble and loss of time being worse than the loss of money in the first instance."

Lancaster's first school did not show any peculiar signs of success or prosperity. Even though swelled by a considerable proportion of gratuitous pupils, the summer school-list was only about one hundred and twenty. In winter the attendance scarcely reached one half this number. At one time, during a period of scarcity, many of the children had dinner as well as education gratis, — the cost being defrayed by certain generous friends of the promoter of the scheme.

It was while practising, or, rather, vainly attempting to practise, the plan which he had thus devised, and which he had adopted much too hastily and prematurely, that he " stumbled," to use his own term, on a plan similar to that of Dr. Bell, *before* reading the Madras Report. This was denied by the supporters of the National system; but although Lancaster was induced to admit that after reading the Report he had adopted some of its ideas to improve his own scheme, he still persisted in the statement that the monitorial idea was one hit upon by himself independently, and was therefore equally original with that of his predecessor,

The effect of the new method was almost startling in its success. In 1801 he had to remove to more extensive premises, provided for him through the valuable influence and help of Lord Somerville and the Duke of Bedford. This establishment was the forerunner of the present Training College and schools which many years afterwards were erected on the same spot. A more enthusiastic teacher than Lancaster never lived. Far from rushing off to his home or other occupations as soon as school hours came to a close, he would join the children's play in the intervals of work, and invite companies of them to tea. His very holidays were spent in their society, — in country strolls and outdoor recreations. Self-sacrifice was really a pleasure to him, for it was the indulgence of his earnest desire to be useful to his charge. Unfortunately for him, he became famous. Visitors of the highest rank crowded to witness the extraordinary spectacle in which one schoolmaster was teaching a thousand scholars. "Foreign princes, ambassadors, peers, commoners, ladies of distinction, bishops, and archbishops," says Mr. Dunn, the able and energetic secretary of the British and Foreign School Society, "turned their steps to the Borough Road, and there beheld a scene they were not likely to forget. The whole tone of the place was joyous, duties were agreeably varied from hour to hour, and though the noise often bewildered a visitor, it was at least the noise of animated work, and was succeeded in an instant, at the word of command, by perfect stillness."

That Lancaster did not solve the vexed and difficult problem of school discipline — notwithstanding the above glowing description — is evident from the strange and absurd devices for punishment enumerated in his own list. One of the favorite methods at first adopted was that of the "log," — a mode of torture which reminds one of the ingenuity of Oriental magistrates rather than the humane suggestion of a man who above all things wished to avoid actual flogging because of its cruelty and degradation. Of course the absence of "corporal punishment," with such contrivances as the "log" and the "shackle," was merely nominal. To avoid a chastisement which applied a smart pain to the shoulders, or, however applied, was not actually injurious to health or limb, and to replace it by another which gave pain without physical smart and added moral humiliation, had at first sight a specious appearance, not only of novelty, but of a revolution in school management. But experience proved otherwise; and Lancaster himself had to abandon many of the puerile devices which had apparently promised to solve the great and growing difficulty of discipline.

Four years after the opening of the second school in the Borough Road, Lancaster was summoned to an audience with the King; and it was on this occasion that the kind-hearted monarch gave utterance to a saying almost as historic as that of Henry IV. of France. "I would," said the enthusiastic Frenchman, "that every peasant in my dominions may have a fowl in his pot." "It is my wish," said George III., "that every poor child in my dominions should be taught to read the Bible."

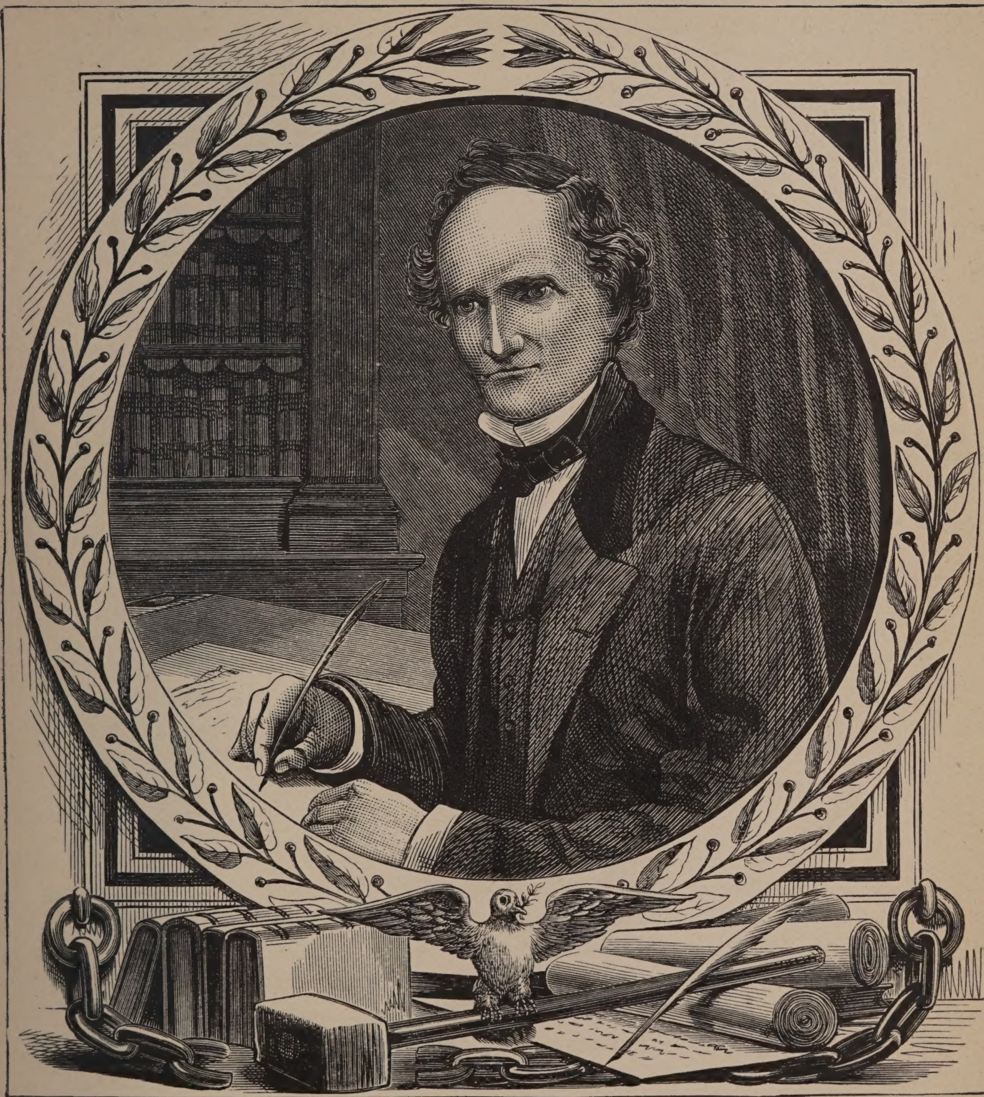
A new era in the history of the Lancasterian movement began from this interview. The King headed the subscription list, and money poured into the school exchequer. Lancaster was at this moment a complete success. But at the very juncture which might have proved the making not only of the system but of the man, he lost his head. He began a series of progresses to various towns, delivering lectures which he illustrated by the aid of monitors who accompanied him. The enthusiasm which animated his explanations spread to his varied audiences, and he had the satisfaction of asserting that in one year a new school on his system had been opened in every week. In this way, and by reckless expenditure on school treats and a visionary attempt to adapt the system to agricultural processes, the funds, once apparently inexhaustible, and in reality exceedingly ample, were reduced until the imprudent speculator found himself not merely impoverished, but in debt. In this state of things a committee was formed, who, seeing what might be made of the system with judicious management, paid Lancaster's debts, and rehabilitated the undertaking under the name of the Royal Lancasterian Institution. This took place in 1808. Six years later, the name was changed to that of the British and Foreign School Society, in which it still continues. In all these changes Lancaster might still have been happy and successful. But he could not control financial matters. Allowed an ample salary, and burdened only with the condition of keeping a strict account of his pecuniary transactions with regard to the institution, he yet could not mould himself to the safer and more prudent line of conduct. The result was that finally he quarrelled with the committee, threw up his place, opened a private school at Tooting, and, after a repetition of pecuniary troubles, in 1818 emigrated to America. For twenty years he labored on the familiar lines, with frequent reverses, but with many opportunities of success, until at length an accident in the streets of New York put a sudden end to his troubled and fluctuating career.

In looking back upon the labors of this devoted and enthusiastic schoolmaster, we can afford to forget all his faults in the presence of the truly great work which he founded and carried on to such unquestionable success. The one point on which he insisted, of making the teaching of the Bible a part of his curriculum, was in his own day, as it has been since, seized upon as a party and sectarian question. It was that on which controversy hinged, and about which the storm arose which was referred to in our sketch of Dr. Bell. The recent decision of the Birmingham School Board, after so much bitter disputation, favors the opinion that, on the whole, Lancaster's view was correct. And it is the opinion of one of the most experienced of school inspectors, that, above all things, Lancaster's greatest praise was his vindication of a Christian yet unsectarian system of education.

ELIHU BURRITT.

[Born 1810. Died 1879.]

IT is one of the prominent traits of nature's nobility to disdain higher titles than those which fortune brings. The innate ambition of these "sons of the soil" does not appear in a name, in being or becoming great, but in improving their own race and time, and leaving the world better than they find it. A true sagacity characterizes them, and they are acutely alive to the imperfections of both. So with heroic courage they leap into the breach, and become the means of a reformation which marks their memory beyond the power of ages to efface. When Marshman, the master of languages, translator of the Bible, and founder of the Indian colleges, as he sat at



ELIHU BURRITT.

table and overheard one distinguished guest inquire of another whether he (Marshman) had not been a shoemaker, he vigorously replied, "No, only a cobbler."

Justice can assert her rights even among the humblest, and these are happily hereditary; for when Elihu Burritt, the subject of these lines, was first brought into notoriety, he at once replied: "I had, until the unfortunate *dénouement* which I have mentioned, pursued the even tenor of my own way, unnoticed even among my brethren and my kindred. None of them even thought I had any particular genius, as it is called. I never thought so myself." He realized that "a prophet is not without honor, save in his own country and in his own house," yet he persevered, insensible of the public gaze which was already fastened on him, and unaware what a crown his genius was then weaving. His life was a vivid example of what hard work and untiring application can accomplish. The true nobility of man and dignity of labor were his by inheritance. He knew that

"Perseverance keeps honor bright,"

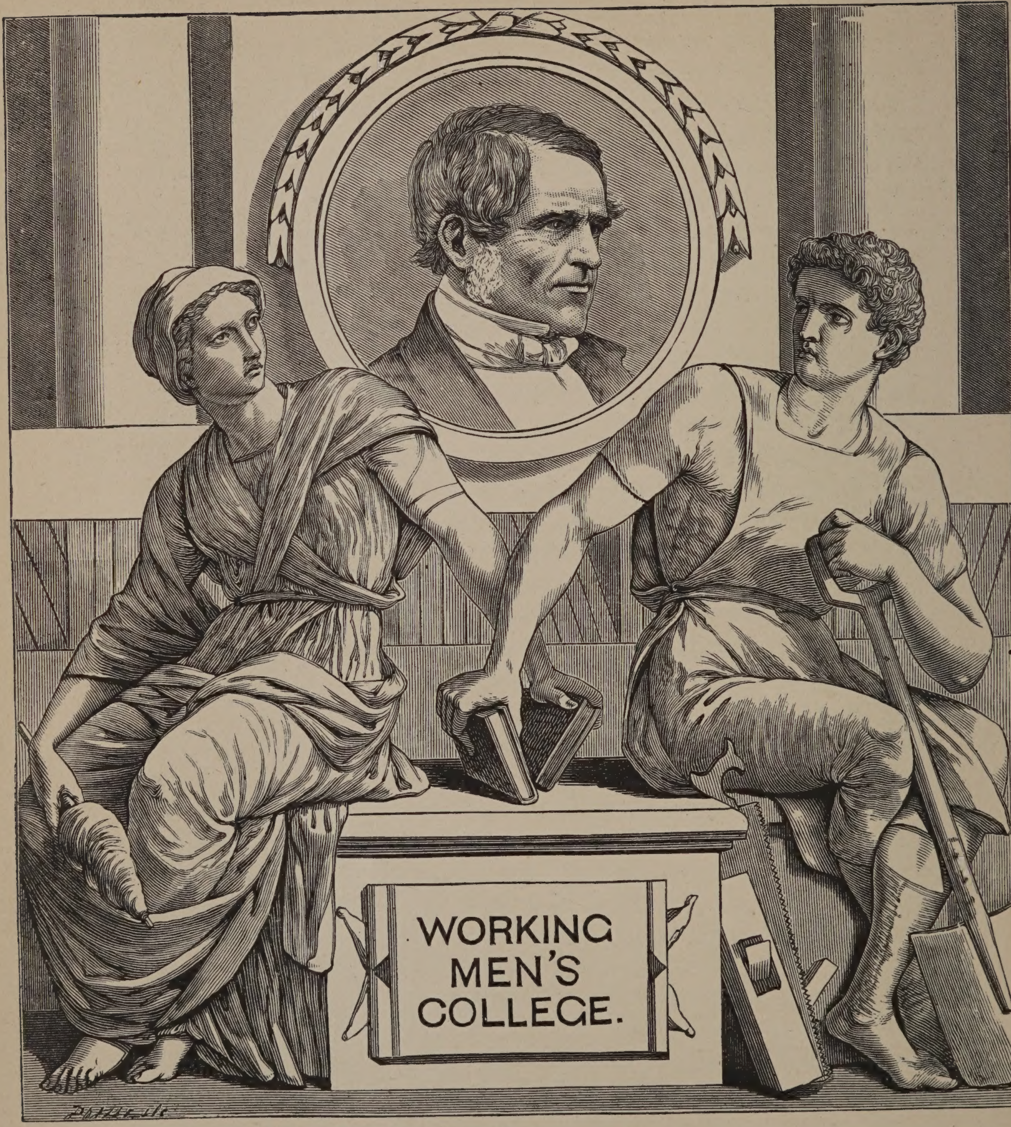
and so worked and labored until the end came, when he passed to a far higher ministry than earth had to offer.

Elihu Burritt was born at New Britain, in the State of Connecticut, December 8, 1810. His father was a shoemaker and farmer, — a hard-working man, who united with his homely calling a degree of philanthropy almost unknown, and whose only legacy was his patient, noble example. This Elihu inherited and zealously cultivated. In his youth the means of education were few; and the only opportunity he had of becoming acquainted with books was through a loving mother, who subscribed to the village library, which was only open once during eight weeks. However, his genius first raised him to the dignity of a blacksmith, in which capacity during twenty years he found leisure for storing his mind with knowledge, so that at the age of twenty-seven he could read about fifty languages. Suddenly he found himself famous. Night after night he sat down, with aching limbs and his hands blistered and painful, to master some profound question, the fruits of which he would sow broadcast for the good of the class and community to which he felt it an honor to belong. This was all his ambition, — to be useful to others in his generation and as long after as Providence might think fit. What a lesson for our sons of toil, the whole world over! What an amount of brain energy and valuable time is thrown away in useless contests or drowned in the drink pot! And the saddest thought is that neither the time nor the energy can be recovered, — an effect which must recoil on future generations.

Elihu Burritt was essentially a working man from the first to the end of his days. The improvement of his people and country was his sole purpose. He never saw his own greatness. This he desired for others; and when he stepped from his smithy floor it was direct to the platform to proclaim the first and golden principles of "peace on earth and good-will to men," and from these he was led into the essential side streams of temperance, abolition of slavery, ocean postage, development of industries, etc., which he ably advocated in a weekly periodical specially commenced for the purpose.

The first fruits of his advocacy of peace principles were shown in 1846, when he became the bearer of the news of an amicable settlement of the difference between England and America respecting the Oregon territory, and his feelings were uttered in the most poetic and sublime language. But his work was far from being done. In the dark hour of Ireland's real need in 1847 he paid a visit to that country; and in response to his appeal the hearts of millions, black and white, were stirred in America, and at length ships of war were laden, not with shot and shell, but with peaceful ammunition, in the shape of barrels of pork and flour for the starving masses.

He lived to see further fruits of his thought and labors. Richard Cobden in 1849 was induced to bring before the House of Commons a motion which, although lost, raised the testimony of more than seventy members in favor of international arbitration; and in 1871 Henry Richard, M.P., followed with a similar motion, which has been acceded to, not only in



THE REV. F. D. MAURICE.

England, but in several other countries, the settlement of the Alabama claims being proof that those questions can be accomplished without the intervention of sword and rifle. Such events cannot do less than mark the periods as memorable; and for the individuals who occupied the stage of action, who thought brilliantly and worked heroically, there exist no brighter laurels than those which deck the brow of the New England blacksmith. Busy with his voice and pen, although he was pursuing the avocation of a farmer, in the work of the good of the universal brotherhood of man, he still labored faithfully, and at last peacefully closed his career of eminent usefulness on the 7th of March, 1879, in his sixty-ninth year.

Of his writings it may be said that they are unsurpassed for earnestness, eloquence, feeling, elegance, and power of description. They comprise many volumes, the principal of which are "Sparks from the Anvil," "A Voice from the Forge," "Peace Papers for the People," "Walks in the Black Country," and the "Mission of the Great Sufferings," besides smaller works intended for the young.

We cannot conclude this brief and imperfect sketch of the career of this eminently good man without referring to the part he took in reducing the rate of ocean postage. To him we are mainly indebted for the privileges we now possess; and this, among the many noble deeds in which he has at least taken part, if not actually accomplished, will cause his memory to be revered and blessed by generations yet unborn.

THE REV. F. D. MAURICE.

[Born 1805. Died 1860.]

THE literary world has been looking forward to the time when Major Maurice's military duties should permit him to complete the memoir of his eminent father. As, however, that memoir has so recently appeared, it may be permissible to give a brief account of the origin, institution, and progress of that benefaction to the London artisan, the Working Men's College, with which the Rev. Mr. Maurice's name is indissolubly connected, and of which he was for many years the revered principal.

The Rev. Frederick Denison Maurice, late chaplain of Lincoln's Inn, Professor of King's and Queen's Colleges, London, was born in 1805. At an early age he entered Trinity College, Cambridge, about the same time as John Sterling, 1823. The friends afterwards migrated to Trinity Hall, and Mr. Maurice ultimately took his degree at Oxford. He was the author of numerous religious and philosophical works; but an examination of the purport and power of these must be left to one thoroughly acquainted with this eminent divine and public benefactor's theological and philosophical views.

To form a true estimate of the value of the Working Men's College as a benefaction to the working men of London, we must recollect that the educational views which led to the establishment of school boards and of school-board schools were in the earlier days of the college as yet undeveloped. The institution of the college itself may indeed have been a by no means unimportant factor in bringing about that educational reform; for it was designed to palliate a national oversight, and to offer to the irregularly educated working man opportunities for mental and physical improvement at a merely nominal cost, and not only this, but to the talented and aspiring the means of rising to intellectual eminence. Such intentions could only be efficiently carried out by educated and earnest men bending their energies willingly and gratuitously to the noble work of teaching.

The notion which took such a strong hold on the minds of Mr. Maurice and his coadjutors, and which led to the institution of the college, appears to have originated in some self-questioning of Mr. Ludlow, of Lincoln's Inn, who, moved by the events of the revolution of 1848, asked, not only himself, but others, whether he and they were doing as much as they might and ought for that large public of less means by which they were surrounded, — the poor and the artisan. The answer was a proposal to the then newly appointed chaplain of Lincoln's Inn, Mr. Maurice, that some near district should be taken in hand by the lawyers whom Mr. Ludlow could get together. Little Ormond Yard was at last handed over to this little band of zealous workers, who, under the name of Christian Socialists, sought in various ways to ameliorate the condition of those who were writhing under difficulties around and below them. These benefactors used to meet at Mr. Maurice's one evening in the week, when Mayhew's letters on "Labor and the Poor," which appeared in the "Morning Chronicle," were frequently the subject of conversation. "Few of us," says Mr. Furnivall, from whose "History of the College" our information is in the main derived, "had any idea of the widespread misery in the workmen's homes around us, and fewer still knew how the 'slop' system had been at work lowering wages, destroying the honorable trade, and forcing women and children into work." Then a working-men's association was projected, £300 was got together, and a manager was found. The Rev. Charles Kingsley wrote a pamphlet, and the association opened at Castle Street East, Oxford Street. Then came the tracts on Christian Socialism by Mr. Maurice, to explain why such associations were needed. The "Christian Socialist," a penny weekly paper, was started. Mr. Vansittart Neale came forward to help this band of workers, which now became the propaganda, advocating the establishment of similar institutions in different parts of the country. They built a hall; and here were begun, at Mr. Ludlow's suggestion, classes and lectures, to both of which women were admitted.

"A great want," says Mr. Furnivall, "had all along been felt for better education among the co-operators, and at our meeting on January 11, 1854, the minute-book records: 'A conversation took place concerning the establishment of a people's college in London, in connection with the association.'" And further on, "The following resolution, proposed by Mr. Hughes, seconded by Mr. Lloyd Jones, was carried: 'That it be referred to the Committee of Teaching and Publication to frame, and, so far as they think fit, to carry out, a plan for the establishment of a people's college in connection with the metropolitan associations.'" The Committee of Teaching and Publication consisted of the Rev. F. D. Maurice (President), Viscount Goderich, the Rev. H. J. Hose, William Johnson, Esq., the Rev. C. Kingsley, A. H. Louis, Esq., J. M. Ludlow, Esq., E. Lumley, Esq., C. B. Mansfield, Esq., E. Vansittart Neale, Esq., the Rev. C. K. Paul, C. R. Walsh, Esq., John Westlake, Esq., Thomas Shorter, Esq. (Secretary).

Mr. Maurice outlined a plan, and put into their hands a printed statement of some dozen pages, on February 7, 1854. In this paper Mr. Maurice, among other important matters, gives a reason for adopting a somewhat ambitious curriculum: "My reason for starting with such difficult subjects as politics and ethics is because all our pupils are politicians and ethical theorists before they come to us. What we want is to put order into their crude thoughts, or rather to lead them gradually to perceive (we ourselves learning as we teach) the order which is at the bottom of their thoughts." Mr. Maurice's draft concludes with some consideration of the question how far the education of the workwoman may be joined with that of the workman, and where they should diverge. But the need of such an institution as the Working Men's College was well summarized in a circular which was afterwards issued: —

> "The working men of England are trying from various motives and in various ways to educate themselves; some of them hope that their class may obtain greater influence in the legislature. They desire that it should qualify itself for that position by the study of laws and of history. Some of them think that there are many maxims of morality current among us which tend to divide and to degrade them. They wish to find out the true principle which binds them together and shows them what objects they are to live for. Some are impressed strongly with the mischief that comes to them from their ignorance of the causes which produce disease and of the best means of securing health. Some wish to understand better the machinery with which they are working. Some feel what a blessing it would be to them if they could use their voices in singing and their hands in drawing. Some are puzzled with a number

of doubts about the world within and without them, which they dare not stifle, and through which they long to see their way.

"Working men have, therefore, established debating societies and societies for mutual instruction among themselves, or they have profited by the mechanics' institutes and evening classes which others have established for them. Of late in Sheffield (and we believe also in Nottingham) some of them have set up a people's college, where they hope for more thorough instruction than they can get by either merely talking together or by merely attending lectures on miscellaneous subjects.

"This thought, it seems to us, is very valuable. The name college is an old and venerable one. It implies a society for fellow-work, a society of which teachers and learners are equally members, a society in which men are not held together by the bond of buying and selling, a society in which they meet not as belonging to a class or a caste, but as having a common life which God has given them, and which He will cultivate in them."

Such, then, were some of the preliminaries to the establishment of the London Working Men's College, first opened at 31 Red Lion Square, October 31, 1854, and subsequently, in 1857, at 45 Great Ormond Street, and which has now become so famous and widely known.

One of the professed objects of the college was to mitigate class prejudices by the intercommunion of teacher and student. This has led to what is called the social life of the college, in which both meet to discuss questions of importance, or at conversations, or in some interesting excursion. Good fellowship was further promoted by the formation of a choir, a cricket club, a rifle corps, etc. Of this social life Mr. W. B. Litchfield, an old friend of the college, has been the presiding spirit.

The college could only have been carried on by gratuitous teaching. The number of eminent men who have devoted themselves to this work is too numerous for us to record. This very fact is in itself an earnest to the working man that other classes take a deep interest in his desire for improvement, in his aspirations. Many teachers have rendered gratuitous service through many years. This voluntary service has no doubt had its effect in producing that cordial unanimity of feeling which obtains among all connected with the institution. And the teachers who have retired from active work and transferred their torch to other hands will all bear testimony to the persistency of the grateful remembrance of services rendered. Mr. Maurice was in the widest sense of the word a "humane" man, and his humanity initiated that admirable tone which has ever since been maintained in the college. He had a breadth of sympathy and a hopefulness of outlook which endeared him to all. For the earnest and striving he always had encouraging words. There is the future before you, he seemed to say; make the best of that. Nothing is denied to well-directed industry.

The executive heads of the college have always endeavored to secure its independence, and this object has to a considerable extent been attained. They have always been reluctant to make public appeals for assistance. Still we know that the usefulness of the college might be increased if it only had an ampler exchequer. Noisy agitation frequently fills the coffers of institutions of far less utility. Nevertheless it has found some generous donors. The Prince of Wales contributed to the Building Fund.

The lamented death of Mr. Maurice, the first president of the college, occurred April 5, 1860. His remains were interred in Highgate Cemetery, with every demonstration of affection and respect, on the 10th: a large concourse of friends, teachers, and students followed in procession and gathered round his grave.

The college is now flourishing under the presidency of Mr. Thomas Hughes, Q.C., who gratefully acknowledges, as do very many eminent men, that he is indebted to the example and to the teaching of Frederick Denison Maurice.

GEORGE AUGUSTUS SELWYN.

GEORGE AUGUSTUS SELWYN.

[Born 1809. Died April 11, 1878.]

"A Christian athlete, with eyes strong of ken,
Muscles of steel, a foot swift as the wind,
Lungs free of play in the broad-chested frame,
Firm hand on rudder, lusty arm on oar,
A voice that keen and clear as clarion came,
Courage that risks of land and sea o'erbore.

"And with that strength of frame like strength of will;
A purpose clear as was his steel-gray eye;
Courage his end to see distinctly still,
And pluck to do whate'er he set to try.

"So he sailed forth across Australian seas,
To where the savage Maori held his own,
Bark-robed, tattooed, close watching, ill at ease,
The white man's strength, still growing, not yet grown.

"And there the Bishop stood, between the war
Of clans and chiefs and settlers all alone,
Holding the Christian banner high and far
'Bove smoke of strife, and noise of war-conch blown!

"Till settler, savage, in all else apart,
Both owned the Christian courage, Christian zeal,
And Christian singleness of eye and heart,
Wherewith the Bishop strove for either's weal."

So "Punch" wrote, and well, of the subject of this brief sketch. As a lad, George Selwyn was an acknowledged leader in all that was brave and pure and good. After passing a brilliant career at Eton, alike in physical as in intellectual pursuits, we find him, in the midst of self-denying labor as curate of Windsor, furthering the work of the Church in that town by returning the hardly earned stipend of two years' labor towards the removal of a debt connected with the same. While here, Albert "the Good" evinced marked regard for him; and from that time Her Majesty took more than an ordinary interest in the young priest's welfare. In the year 1841, with his university honors fresh before the public, he was called to go out as the first Bishop of New Zealand, a colony yet red with the blood spilled by cannibals. Many of his friends, among whom was Sydney Smith, prophesied anything but a favorable ending to the enterprise. The trenchant words of Sir Robert Peel, who was then Prime Minister, were, however, a kindly tribute to the godly zeal of the young missionary, and fitly described the power that drew him from home and certain preferment to the care of a wild and uncivilized colony. Upon being questioned as to the motive for young Selwyn's action, and hearing expressions of wonderment and concern at the same, he turned to his interrogator and quoted the well-known lines, —

"He sees a hand we cannot see
Which beckons him away."

During the voyage out the tutor became the scholar, and acquired such a knowledge of the Maori language that he was enabled to preach his first sermon to the natives in their own tongue. This, together with the art of navigation, which he also learned during the journey, secured for him the immediate esteem of this uncouth people. His great aim was to found a branch of the English Church in that far-off land, and to that end he devoted himself with true apostolic fervor.

The account of his subsequent life reads like the romantic pages of a well-written novel. He and the Maoris became strongly attached to each other; and his zeal for their social and political as well as their religious interests was gratefully recognized by, and gave him no small influence over them. To them he was an exemplar of muscular Christianity, and so gained universal admiration. No life could be more full of marvellous incident, and show more indefatigable labor for mankind, than his: to-day the broad-shouldered prelate is building, log by log, his own hut; to-morrow holding the tiller of his twenty-one ton boat as he journeys to and fro among the scattered islands of the South Pacific; now riding from redoubt to redoubt, as he administers comfort alike to Englishmen and Maori in the New Zealand war; then searching through brushwood and swamp in order to solace the wounded and the dying; here designing and building a college, with the skill of a trained architect, for the tuition of natives; there, in the cabin of the "Undine," cutting out and making from sailcloth the first civilized clothing that the earlier students are to wear; and again crossing a swollen torrent with his timid archdeacon on his back; but always leaving behind him, whether in the heart of the white settler or of the untutored aborigine, the sacred memory of a Christian and a man.

In 1854 he returned to England, and by the soul-stirring addresses which he delivered at Cambridge secured for mission work two kindred spirits, Mackenzie and Patteson, the latter of whom, alas! soon filled a martyr's grave. His power of administration is well exemplified by the fact that when he entered upon his work at the antipodes he was the first and only Bishop of New Zealand, but before he left, the diocese was divided into seven, namely, six sees for New Zealand and one for Melanasia. In 1867 he again visited England to attend the Pan-Anglican Synod. While here the Bishop of Lichfield died, and the vacant see was offered to Dr. Selwyn, but declined. His heart yearned towards the church he had nursed, and it was only upon pressure from Her Majesty that he reluctantly accepted it, visiting his old diocese once more in order to take a last farewell of it. As the apostle to the heathen in the South Pacific his name will be handed down to posterity; and as the ninetieth Bishop of Lichfield he will be held in reverence by all who knew him, and by generations yet unborn.

While he left so much of his heart in the other hemisphere, he gratefully gave himself up to the new mission, content to change the romantic scenery of the Pacific, and those happy voyages in the "Undine" and "Southern Cross," for the smoky atmosphere and dingy sky of the "Black Country." There was ever within him a force of divine power which enabled him with heroic magnitude of mind to consecrate his whole being to that work to which God's providence was pleased to call him; and wherever he was, whether at Eton or Cambridge, whether a student at college or a curate at Windsor, whether as the first Bishop of New Zealand or the ninetieth Bishop of Lichfield, he was felt to be a power in the world. It will not be out of place here to notice that his life of hardship in the mission diocese was passed as an abstainer from alcoholic liquors; and, feeling the amount of injury done to the natives by the introduction of strong drink, the cause of temperance had his cordial support.

Space would fail to allow of more than a glance at his labors on behalf of canal boatmen, for whom he had a floating church built; of his love of home mission work; of his endeavors to promote education; and of his efforts in aid of church extension. The peer and the pauper, the begrimed pitman and the book-learned student, the sick and suffering, the convict, the outcast, and the fallen, have all received his ministrations, and in trouble he was the most acceptable of comforters. Well might Mr. Gladstone say that the only term that could convey to your mind the true character of the man was "noble."

"His was the blameless life, the kindly soul,
The honest heart that ever loved the right;
God rest the worker in his final goal.
The winter snows fall lightly o'er his breast,
The pure in heart has now a spotless shroud;
God rest the worker, — he is now at rest.
No longer ill or cloud
In the 'far land of light.'"

GRACE DARLING.
BORN 1816. DIED 1842.

GRACE DARLING.

GRACE DARLING.

[Born 1816. Died 1842.]

IT is seldom, we believe, that self-sacrifice and sterling bravery, as exhibited by the life-boat crews on the Durham and Northumberland coasts, can be excelled elsewhere. The shore for many miles lies unusually exposed to the terrific action of the fiercest gales; and the sea, lashed into wild fury, breaks upon it with intense violence and the voice of thunder. The dangers of the locality are considerably increased by the rocky nature of the coast, and the extreme difficulty which often attends the efforts of those in command of vessels to enter the few small rivers, which are almost the only harbors. At all points, and even when the sea at other places is smooth and calm, serious casualties occur. Vessels become helpless in the storm, and drift before the north or northeast wind, falling at length upon sunken rocks which abound; and, probably before human aid can be given, both crew and passengers perish. History abounds with thrilling adventure and miraculous escapes which have been witnessed in these regions; and its golden charm encircles one particular spot, which, but for the events of a few short hours, might never have been considered worthy of even a passing thought. In casting the eye over the map, and tracing the course of the east-coast railway-route from London to Edinburgh, the traveller will remember the features already pointed out, as well as the gigantic development of rock into what are known as the Farne (or Ferne) Islands, which lie about five miles from shore, opposite Bamborough Castle and Belford, and south of the romantic Holy Island and Old Law. The voyager who has sailed in their vicinity may also bear testimony to the aversion with which the captains of coast-bound vessels regard these demons of the deep, as well as to the force of the tide in the channels formed by the islets. The group consists of twenty-five, which may be said to be rock itself raised above the level of the tide, and their surface is destitute of vegetation, being barren, waste, and lonesome; yet, notwithstanding, they appear to us clothed in curious garments of legendary lore concerning hermits and ruins, and enchanted castles are celebrated in song and story without limit.

In order to avert, at least, some of the dangers of these rocky cliffs which constantly threatened mariners, a lighthouse was erected on the outer, or Longstone Island; and this, when the present century was yet young, became tenanted by a man named Darling, — a name destined to be famous in the estimation of all who value a self-sacrificing spirit. Here William Darling made a comfortable home for his wife and eight children, and in the long leisure hours permitted to him he cultivated it to such perfection as few of its class seldom reach. Possessing a good library, valuing knowledge, and carefully cherishing the habit of thoroughly mastering all the details, he was a fitting tutor to his young family, in whose minds he assiduously instilled the essential rudiments of an earnest religious as well as secular education. Although professing with the Established Church, he was said to be puritanical in his principles, rigorously excluding from his home cards, dice, foolish games, and everything that was likely to influence the mind against sound thought and the essentials of a good and blameless life. For his undeviating holy example and precept his children have repeatedly expressed themselves thankful; and the picture of their home is a pleasant one, — a family so united that there was no room for conceit or modern make-believe to enter and destroy the Bible rule of showing honor to the parents whom they loved as their life.

William Darling was also brave as well as virtuous. He was acquainted with dangers from his youth, for he lived with his father, who was keeper of the light on Staples Island, a post of peril; and when transferred to Longstone he was ever ready to go off in his boat and bring home the sufferers so often thrown on the cruel rocks by the merciless sea. His sons partook of his courage, and shared with him the perils; and many lives have been thus spared to spread abroad the intelligence of their goodness, and that of Mrs. Darling and her daughters, in the care and attention bestowed upon them under these distressing circumstances.

In this secluded home the subject of this notice was born, November 15, 1816. She soon became an engaging child, and, as years flew by, her desire for knowledge delighted her father when she joined the others in their schoolroom, the lighthouse lantern. Devoted to her parents to an extent which few are, she seldom cared to leave home, and it is said she was never but one night from it up to the time of her illness. Her leisure hours were often spent in exploring the island for specimens of natural history, in which science she became proficient. Often, too, had she seen her father and brothers launch their boat on the stormy waves to rescue some poor sufferers from certain destruction, and, with her mother, would watch in an agony of suspense until their return, when their help was needed to revive the unfortunate people wrecked near their home.

At length Grace was left alone with her parents; her sisters were married and dispersed, and the brothers were in quest of their living in other places. She was now about twenty-two years of age, possessing remarkable but well-moderated buoyancy of spirits, and was highly appreciated by those who knew her for her good sense and mental qualities, all of which, no doubt, added charms to her naturally pleasant countenance, which many under cause for devotion and admiration would pronounce beautiful. Her hitherto quiet life was now interrupted by an event which made her name famous; but it is recorded to her lasting credit that she remained as humble-minded as before it happened. On the 5th of September, 1838, without previous indications, a storm arose suddenly towards night, and continued hourly to increase, until even the minds of the occupants of the lighthouse were disturbed. They reluctantly retired to rest; but the howling of the storm and the roar of the mighty billows without were portentous of coming evil, and they listened with eager and anxious ears. Grace was, of the three, the most intensely excited; and just before daybreak she thought she could hear the shrieking of human voices above the noise of the tempest. Soon she heard them repeated, and ran to her father and besought him to hasten to the relief of the sufferers. They reached the boat. Grace leaped in and seized the oars; and it is said the stout-hearted, good man for once felt himself unequal to the task; but, seeing the determined attitude of his daughter, and roused by her importunate appeals, he launched the boat. Mrs. Darling, trembling with fear, stood on the rock and watched the boat and its occupants as it was tossed upon the mighty waves; and well might she quail with such a sight before her. Mightily and dexterously are the oars pulled, while the frail boat is lifted high up to the heavens, and next engulfed in the great gaping valley of the wave: then again it totters and reels; but skill and wisdom are there, and these, directed by an impressive evidence of the presence of God, are sufficient. Brave William Darling, by an effort at once both dangerous and desperate, and made in conjunction with a preconcerted arrangement with Grace, leaped upon the rock, and at the same moment the boat is rowed away into the boisterous waters to avoid being broken to pieces, and there skilfully caused to ride as proudly and gracefully as a bird. Grace had never had occasion to assist in managing the boat in such a case before; and the fact thus renders the event unparalleled in the annals of history, not only for her intrepidity, but for the calmness and faithful devotion to the cause of suffering humanity. Eventually the survivors of the wreck — nine in number — were rescued; and one, an old sailor, when he beheld the boat, manned only by two persons, come to the rescue, could not restrain his tears, more especially evincing his gratitude when he saw the delicate and youthful female who had risked her life in that awful storm. Among the sufferers was a lady, who had sunk on the rocks exhausted by her injuries and insensible, clasping the lifeless bodies of her two children, who had been killed by the waves buffeting and bruising them on the stones. These were taken to the Longstone Light and carefully tended, until their condition was such as to enable them to be removed safely.

The ill-fated vessel was the "Forfarshire," a steamer belonging to Dundee, and sailing to that port from Hull. From evidence subsequently obtained it was proved that the boilers were defective, and that the captain, although fully aware of a leakage in one of them, still persevered in sailing. The pressure of steam tore away the frail stopping, and the escape of water soon put out the fires. Notwithstanding, he would not then put into port, which he might have done with ease and safety. They passed Farne Islands at six o'clock on the evening of the 5th of September, and made Berwick Harbor; but, the storm having reached almost its height, the vessel having no steam refused to answer the helm, and drifted like a log southward before the wind until they struck upon the rocks. The crew managed to lower a boat in which nine persons escaped, and were picked up next morning about eight o'clock, after being exposed about thirty hours, and were taken to Shields by a passing ship. The wreck was observed from North Sunderland, and a boat was manned by seven men, one of whom was the brother of Grace Darling; but when they reached the wreck it was already fast disappearing, and only dead bodies were found. The violence of the storm being unabated, they were compelled to take shelter for two days in Longstone Light, with the sufferers already rescued by Grace and her father.

The public mind was soon aroused by the heroic conduct of Grace, and the nation was determined to do her honor. She received a handsome recognition from the Queen conveyed by the Duchess of Northumberland, who summoned her and her father to Alnwick Castle, and afterwards extended to her an amount of solicitude which told more plainly than words how the act of the simple maiden had been appreciated. Subscriptions also flowed in rapidly for her benefit, and her deed and name were immortalized in verse; besides which base attempts were made, in the hope of personal gain, to induce her to become a public gazing-stock. She indignantly refused to leave the retirement of her home, and wisely continued beside the parents she loved. She was naturally delicate, and after some time signs of indisposition were evident, when she was removed to the mainland for change of air and scene, the Duchess of Northumberland taking an active part in ministering to the wants of the invalid. All means were, however, fruitless; for that cruel disease consumption had already made serious havoc with her constitution, and she died peacefully at Bamborough, October 20, 1842.

In our notice of the conduct of this truly heroic girl it is out of place to attempt laudation; to her frame of mind it was distasteful when living, and no less dishonoring to her memory now she is passed from us. The simple recital of her deed, the embodiment of courage, faith, and self-sacrifice for the good of others, is enough; and we are sure that, while England can produce fathers and mothers willing to train their children as Grace Darling was trained, her name will not stand alone in the record of noble deeds.

HENRY HAVELOCK.

[Born April 5, 1795. Died Nov. 24, 1857.]

ON one of the last days of November, 1857, the army quitted Lucknow. Death, that grim veteran of the Pale Horse, rode invisible before the column, pointing with ghastly satisfaction to the trophy of his prowess that accompanied it. The sword fallen from his nerveless fingers, his ears forever deaf to the call of battle, Havelock moved onwards for the last time among the heroes he had so often led to victory. At Alumbagh, a few miles outside the city, the army halted. Except as they clasped to their hearts the little ones found in rescued Lucknow, there were but two occasions during the

HENRY HAVELOCK.

Mutiny when those soldiers were known to weep, — once when beside that hideous well at Cawnpore officers and men sat down together, and cutting tresses from the heads of the victims counted the threads, and swore with tears and sobs that for every hair a Sepoy should die; the second time when in the "Beautiful Garden" of the princes of Oude the farewell that best befits a hero thundered over a new-made grave, and with sad hearts the bravest of the brave turned away and left the savior of Lucknow to his rest. He lies there still, or what portion of him is mortal; and in the wreath that hangs above his burial-place the amaranth mingles with the laurel. For he was not only a soldier, but a Christian; and even when most earnestly busied in winning back to Britain her Indian empire, never neglected to seek additions to the kingdom of his Lord. He had equals in the art of ruling a battle. The indomitable Campbell and the chivalrous Outram could, no less than himself, teach Highlander and Sikh how to conquer: it is the peculiar glory of Havelock that with another discipline than that of earth he fitted his veterans to die.

There has seldom lived a great man who had not reason to speak with reverence of his mother. Havelock was no exception to the rule. She who gave him birth gave him also an earnestness of religious belief that was too deeply rooted in his heart not to bring forth life-long fruit. When, after a vain attempt to accustom himself to the uncongenial yoke of the law, the good offices of Baron Altern made him second lieutenant in a rifle regiment, dim longings for a purer renown than glory in arms can confer already haunted him. Eight years later he sailed for India. As day after day the crowded troop-ship moved slowly onward through the desolate grandeur of the Atlantic, fervid aspirations were burning ever higher and higher in the heart of one among the officers whom it carried into a tropical exile. Havelock had made his choice. Henceforth and until death he would fight the battle of his Lord. He knew well the difficulty of the work before him. Service given to Satan was in those days lightly thought of in the British army; but to do the work of God was to insure the setting of a black mark against one's name that might effectually bar promotion. The soldier-missionary, however, had counted the cost. The baton of a field-marshal would have been as nothing in the balance against the duty he owed to God.

It was during the Burmese War, and at the taking of Rangoon, that Havelock first saw a shot fired in earnest. Biographers have preserved the memory of a scene that followed. They narrate how, when this populous Eastern city had fallen, an English officer, wandering one evening among its barbaric splendors, was amazed, in passing a pagoda, to catch the words of a well-known psalm. He traced the singing to the chamber of the pagoda from whence it proceeded, and looked in. There sat Havelock, Bible and hymn-book before him, a hundred of his men for audience, and the glare of half a dozen lamps placed in the huge lap of a Burmese idol giving light for the diffusion of the light of truth. It was thus that our modern Greatheart ever acted. During the hardships of the most arduous campaign he found time to give Religion her due, and when a battle was impending he prepared his men for it with exhortation and prayer. And the men responded nobly to the noble exertions of their leader. Their behavior in camp and field won golden opinions even from those most hostile to Havelock and his system. On one occasion a certain regiment was ordered out to repel a surprise that the enemy had attempted. The general who had directed the movement learned that the troops he wished to execute it were drunk. "Out with Havelock's saints," cried he; "they are never drunk, and Havelock is always ready." A few minutes, and the terrible charge of the "saints" had scattered the Orientals opposed to them.

Thus proving, as Cromwell had proved before him, that the discipline of strong religious feeling does but render troops more formidable in the day of battle, Havelock fought on through many arduous years. Returning to Bombay in May, 1857, from his successful Persian campaign, the nightmare tidings of the Mutiny broke on him in their full horror. Delhi was lost, and Lucknow besieged; and at Cawnpore a handful of Englishmen, shut within intrenchments that a man might walk over, defended their wives and children from the murderous wretches led by Nana Sahib, — that most finished devil whom hell ever sent forth. To the relief of these last Havelock instantly hastened.

England has no more glowing page in her annals than was furnished during the next few months. Sharp and terrible were the pens employed on it, and it was written with the blood of heroes. "Take that battery" was the order by which Havelock sought to test the mettle of his Highlanders in the last battle outside Cawnpore. They answered well to the summons, the granite battalions. The bayonet became on that day a weapon more dreaded of the sepoys than any cannon, and the sombre silence with which the tartaned warriors moved to victory had something in it that, like death, was deep and terrible. The day lost, Nana Sahib took his hellish revenge. It is twenty-one years ago, and still the tragedy is fresh in every mind, and our hearts become as flame at thought of its details, — the neatly ranged rows of children's shoes filled with bleeding feet; the women who, after undergoing outrage not to be described, lay heaped in that hideous well. England heard with a stern satisfaction how Havelock, in obedience to orders, blew from the mouths of his cannon the worst of the murderers whom he caught. Eager at once to rescue and to punish, the avengers fought, lion-like, on to Lucknow. That garrison might yet be saved.

Nothing like the scene of its deliverance has ever been imagined by any writer of romance. The shout of rapture torn from the Greeks of Xenophon when they felt in their nostrils the salt freshness of the sea was as silence in the sight of Heaven compared with the cry of rescued Lucknow. The moment, the supreme moment, in which the frenzied inhabitants first caught the wild strains of Havelock's bagpipes coming nearer and clearer as his Highlanders slowly but surely made a road with the bayonet through the smoking suburbs, — every man a lion in his rage as the horrors of the siege presented themselves to his eyes, — that moment of hope and suspense our own Whittier has thus described: —

> "Oh, they listened, dumb and breathless,
>   And they caught the sound at last;
> Faint and far beyond the Goomtee
>   Rose and fell the piper's blast!
> Then a burst of wild thanksgiving
>   Mingled woman's voice and man's:
> God be praised! — the march of Havelock!
>   The piping of the clans!"

The rebels held the suburbs; the British, the centre of the city. Through streets that literally blazed, so horrible was the fire from every door and window, the slender column of relief pushed steadily forward, Havelock on horseback at its head, and calm as if on parade. Leaving General Neill and a third of their number dead in these fatal streets, the deliverers came at length to the fortified portion of the city, and were seen by the besieged. The moon looked down, and lighted the steps of the women and children rushing to meet their deliverers. A few minutes and the single remaining barricade had disappeared. Then, while the roar of the rebel cannon and musketry still came sullenly from the outskirts of the city, the fierce voice of the pibroch shrilled forth, and to the notes of their own beloved music the Highlanders entered into the presence of those for whom their blood had been spilt. With emotions almost too deep for utterance the sunburnt warriors snatched babe after babe to their breasts, and kissing them blessed the God of battles, whose strong right arm had guided them on to victory ere it was too late.

Two months later, Havelock died. He was spared just long enough to witness the second relief of Lucknow, and, Outram at his side, clasp hands with Colin Campbell under a storm of fire. To say that all England mourned for him is no figure of rhetoric, but the simple truth. His life's work ended right nobly; he lies there in the scene of his triumphs. Christian at once and hero, can we doubt that there was prepared a reward exceeding great for one whose deeds shine bright as the star of the Bath that glittered on his breast?

The lessons of his life are few and plain. The mental intricacies that convert biographers into analysts were absent from the character of Havelock. Patient and self-contained, he pressed ever towards a mark. We should search the history of his career in vain for any of those wayward bursts of glowing and delicate emotions, the offspring of natures in the highest degree affectionate and sensitive, and which cast a strangely tender light on names otherwise too often dark and stained. Havelock's spirit was as keen as his sword. At the call of duty he spared neither others nor himself. The better fitted was he to deal with that terrible crisis when the fate of the Indian Empire trembled in the balance. It has been said that a trace of coldness is apparent in this stainless spirit. Just so does a trace of coldness repel us when our eyes rest for the first time on the stainless summit of Mont Blanc. But as the full majesty of that awful mountain by degrees dawns on us, as glacier piles itself on glacier, and crag after crag towers, snow-covered, above its neighbors, like mighty avalanches poising themselves in the moment of their fall, we feel ourselves on the threshold of one of Nature's chief cathedrals, and are spell-bound with admiration and awe. There is something of this sublimity in the character of Havelock. He towers above ordinary men; but it is as Mont Blanc lifts itself above Greenwich Hill, — he goes a great way nearer heaven. And learning how this hero lived, contemplating, above all, the serene courage of his death, we turn from the spectacle with feelings as though Havelock were an incarnation of the spirit of duty, sent upon earth to teach men what priceless virtues are fortitude and faith.

GEORGE MOORE.

[Born April 9, 1806. Died Nov. 21, 1876.]

FEW lives can compare, for earnestness of purpose and uncompromising sense of duty, with that of George Moore, the merchant and philanthropist. A self-made man, he was entirely free from that narrowness of mind which so often accompanies hardly won success. His life was an epitome of noble deeds, of work conscientiously carried out from the highest motives, and having for its object the welfare of others. He aptly illustrated his own saying that "sympathy is the great secret of life;" for the help that he so abundantly gave in money was far outweighed by the deep feeling for the misery of others which dictated it. He was benevolent from principle, and his charities were as judicious as they were wide-spread.

George Moore was born at Mealsgate, in Cumberland, upon the 9th of April, 1806. His father was a Cumberland "statesman," of rank equivalent to that of a yeoman in other parts of England. His ancestors had lived upon their own land in the parish of Torpenhow, near the market-town of Wigton, for more than three hundred years. George was but six years old when his mother died. She was laid out in the parlor; and the boy, running in from the fields, first realized his loss when, finding her inattentive to his call, he touched her face. The shock was so great that during his long life he never lost the terrible impression of death his mind then received. Of his father George always spoke in terms of respect, and frequently declared that he owed his own upright character to the influence of his parent's integrity and love of truth.

The lad was sent to his first school at the age of eight; it

GEORGE MOORE.

was two miles distant from Mealsgate, and the education provided was of the most miserable description. The master, whom the boys nicknamed Blackbird Wilson, from his habit of singing, was an illiterate old man, much addicted to drinking. The little knowledge he conveyed to the boys he put into them by brute force. George Moore pithily remarks, "The wonder is that he did not break our skulls; perhaps he calculated upon their thickness." At the age of twelve George was sent to a finishing school at Blennerhasset, but there he remained only one quarter, for which his father paid eight shillings. The master was a superior man, and for the first time the boy realized the value of learning and began to regret his own ignorance. The idea of remaining a mere farm-laborer became distasteful to him; he determined to begin the battle of life for himself.

The best opening that presented itself was a small one. He was apprenticed to a draper in Wigton, named Messenger. The first two years of his life there were made miserable by the tyranny of an elder apprentice. It had been arranged that he should sleep at his master's house, and take his meals at the Half-Moon Inn, near by, — an injudicious arrangement which brought him into contact with the lowest and most depraved characters. When, after a time, a young boy was placed under him, — an apprentice who had the command of money, — the two lads amused themselves with gambling, betting, and drinking. The philanthropist always said that his apprenticeship would not bear reflection. Fortunately for George's future, his gambling came to the knowledge of his master, who threatened him with instant dismissal, and was only induced to relent upon the intercession of a friend. This brought the lad to a sense of his folly; he entered his name at a night school, and determined to devote his leisure to education.

When the four years of his apprenticeship were passed, George, in spite of much opposition from his father and favorite sister Mary, determined to seek his fortune in London; and at length, obtaining a reluctant consent, he started for London in the coach leaving Carlisle, and with his hair-trunk, containing his possessions and what to him appeared the large sum of thirty pounds, was set down in London upon Maunday Thursday, 1825. He was provided with introductions to certain Cumberland men in the metropolis, and anticipated little difficulty in finding employment.

But discouragement was to be his portion. No one was anxious to procure the services of the raw, uncouth country lad. Day succeeded day, and ill-success attended every effort. He could not endure to send such bad news to his father; he waited, hoping against hope. At last despair of obtaining employment in London took possession of him. He determined to go to America. His mind made up, he called to say good-by to one of the young men employed in Swan and Edgar's, when he learned that a Mr. Ray, of Flint, Ray, & Co., had been asking after him. He at once hurried to see him, and Mr. Ray, himself a Cumberland man, engaged him, probably out of pity, and because he knew something of his family. He was to commence with a salary of £30 a year.

He had much to contend with. His north-country speech and awkward manners provoked the mirth of his fellows in the warehouse; but he brought his strong will to bear upon both, and in a short time had proved himself so energetic, willing, and obliging as to gain the approval of his employers.

When he had been six months at Mr. Ray's the romance of his life commenced. He saw a bright-eyed little girl, his master's daughter, and at once decided that if ever he married she should be his wife. The ridicule such an avowal brought down upon the uncouth Cumberland lad may well be imagined. But George was proof against ridicule. The idea once started became the ruling motive of his life. It saved him from much temptation; it restrained and purified him.

He might have remained years in Mr. Ray's employment but for a false accusation of theft, which nearly resulted in his ruin and which made him resolve to leave. Through the kindness of Mr. Ray he was engaged by the firm of Fisher, Stroud, and Robinson, of Watling Street, then the first lace-house in the city, at a salary of £40 a year.

George had many things still to learn; but his indomitable resolution overcame all the difficulties which met him, and he gained the respect of all in the office. He was shortly promoted, and after a time was made town traveller for the firm. Then it was that his great qualities were recognized. The amount of work he accomplished was amazing, and after an experience of eighteen months his employers decided that he was worthy of a wider field of action. He was made country traveller. His success in obtaining orders was so great, and his enthusiasm for his work so unbounded, that he became known among his associates as the Napoleon of Watling Street. After six months' success as a country traveller he was sent to Ireland, to see what could be done for the firm there. At Dublin he met Groucock, the traveller who had hitherto monopolized the lace trade, but who now found himself entirely outdone by his energetic competitor. He therefore determined to come to terms, and offered George Moore the high salary of £500 to travel for his firm instead of Fisher's. George refused to leave his employers unless for a partnership; and Groucock to secure his services agreed to his terms, and in 1830, at the age of twenty-three, George Moore entered the firm of Groucock and Copestake as junior partner.

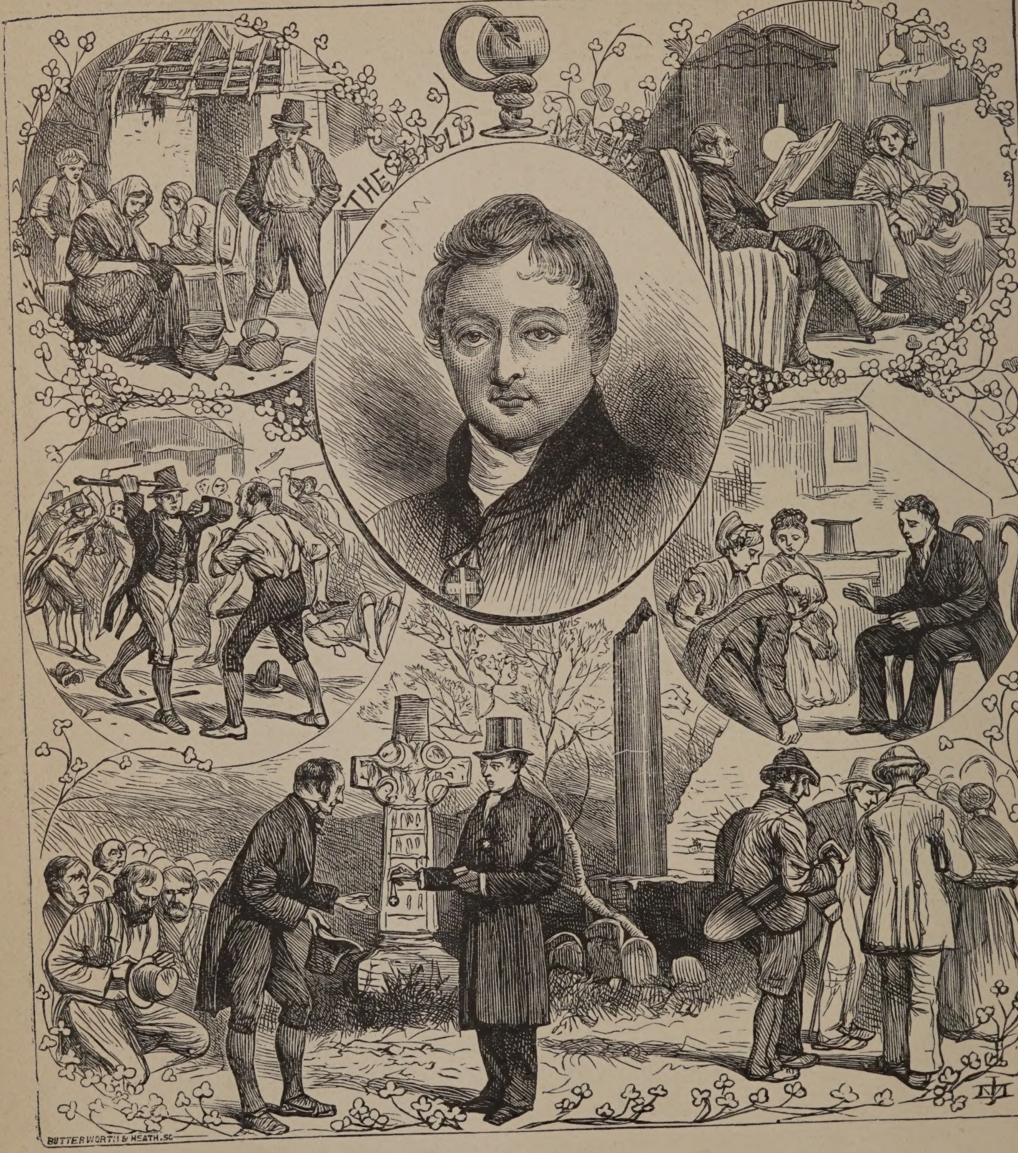
The first year of his new life was not very satisfactory in its results, but it was succeeded by a period of unprecedented success. George Moore worked indefatigably. Sixteen hours a day were usually devoted to business, and he generally remained up two nights a week. One great help in his career was the little need he had of sleep, and the faculty he possessed of sleeping at will. His life suited him; it was full of interest, variety, and adventure. At the end of three years his services were too valuable to be dispensed with. He was made equal partner, with a third share in the profits.

He was now in a position to marry. Bent upon the realization of his romance, he told his secret, and offered himself to the young lady he had so long loved. He was refused. This, the keenest disappointment of his life, could not discourage him. He threw himself still more ardently into his work, and waited for another five years. Then he tried his fortune once more. This time he was successful, and upon the 12th of August, 1840, he married Eliza Ray.

A few years later, by the advice of his physicians, he visited America. It was after his return to London that his philanthropical efforts began. He established a lace factory at Nottingham, where nearly two hundred women were employed; and it became one of the cares of his life to attend to their comfort and needs.

His interest in the life of commercial travellers led to the foundation of the schools for their orphans, which to the end of his life he watched with the keenest interest. Not content with giving money, which his increasing wealth made easy, he spent much of his time in canvassing for the various charitable institutions which came under his notice. His early philanthropical efforts arose from the natural benevolence of his heart; but an illness which overtook him in 1851 awoke him to a sense of his own short-comings, and after his recovery a marked difference was observable in the method of his charity. He no longer acted upon impulse, but from deeply religious motives. He was no longer content to give bodily help to others, but concerned himself greatly about their spiritual welfare and needs.

From this time the history of his life becomes a record of noble deeds. It is impossible to attempt an enumeration of his charitable undertakings. All the energy of his nature was devoted, first, to finding out misery, and then to alleviating it. He spent an immense amount of time and money in schemes for the improvement of education in his native county, founding and endowing schools, and promoting competitive examinations. Much of the good he accomplished was done secretly. He privately paid fees for twenty years to enable men and women who ought to have been married to be united in matrimony. He sought out the cases of poor clergymen with large families and insufficient incomes, and sent anonymous Christmas boxes to them. Refuges for the homeless and fallen, reformatories for those leaving prisons, hospitals, convalescent



THEOBALD MATHEW.

homes, schemes for boarding out pauper children, all in turn claimed his attention.

In 1871, during the terrible siege of Paris, George Moore was one of the most active members of the Mansion House Relief Fund, and was selected to go to Paris, as soon as the gates were open, to superintend the distribution of relief. His heart was wrung with the terrible sights he witnessed. Upon his return his rest was disturbed by his recollection of the horrors of the famine-stricken city. He paid another visit after the sacrileges of the Commune. The Communists had spared the warehouses of the Englishman who had been so active in succoring them.

The death of the greatest philanthropist of modern times was the result of an accident. He was thrown down by a runaway horse, while speaking with a friend in the High Street of Carlisle. Falling upon his right side, his head struck heavily upon the ground. He was at once carried to the Grey Goat Inn, the same at which, fifty-two years earlier, he had slept the night before he started in the Carlisle coach for London. There in a small back room he breathed his last, upon the 21st of November, 1876, twenty-four hours after the accident. To quote from his epitaph, he was "a yeoman's son, not born to wealth; but by ability and industry he gained it, and ever used it as a steward of God for the furtherance of all good works."

THEOBALD MATHEW.

[Born Oct. 10, 1790. Died Dec. 5, 1856.]

On the 10th of April, 1838, Father Mathew headed a weak and inefficient "body" of three — a clergyman of the English Church, a Unitarian, and a Quaker; grand pioneers they were of a great reformation — in the city of Cork. Two years afterwards his temperance troops numbered nearly three millions, — children, women, and men. The words he had uttered when he joined "the three" were these: "Here goes in the name of God!" He signed their pledge and began the work.

In "Ireland: its Scenery and Character," Mr. S. C. Hall writes thus of Father Mathew and his great work: "The good priest was not young when that sword of salvation was drawn in the cause of God. He was remarkably active and energetic. His personal appearance aided his mission. Rather above than under the middle size; not stout, but not thin; the expression of his countenance was indescribably sweet and winning; the features were sharply cut and prominent (with the characteristics that are usually supposed to accompany good descent, — 'good blood,' — his progenitors were of the aristocracy, although they bore the bar-sinister on their shield); he might have been called handsome, but he had a beauty of person that can never exist without beauty of soul; the mind spoke in the face; it was the language of gentleness, patience, endurance, tenderness, loving-kindness, trustfulness, and hopeful affection, such as I have never seen so strongly marked in any one of the thousands of distinguished and good men on whom I have looked. I could have accepted him as an embodiment of 'the beloved apostle;' and I am very sure he was one of the earth-darlings of his Lord!

"It would require a volume to describe Ireland prior to the advent of the apostle. It is among the most marvellous of modern miracles that the wine and whiskey drinkers of the 'better' classes were led to reason and reflect upon, and ultimately were converted by, what they witnessed as to the effects of total abstinence in their poorer neighbors and dependants. No doubt, other influences were at work, and largely contributed to induce temperance among those who were out of Father Mathew's reach; but it was not until 1840 that temperance was considered, in Ireland, respectable, and drunkenness degrading; and that was after the good priest had carried conviction to high and low. I maintain, speaking from actual knowledge and experience, that the change which a very short time wrought in the habits of the upper orders was as certainly the effect of Father Mathew's teaching, as it is that he converted millions of the lower classes from drunkenness to sobriety.

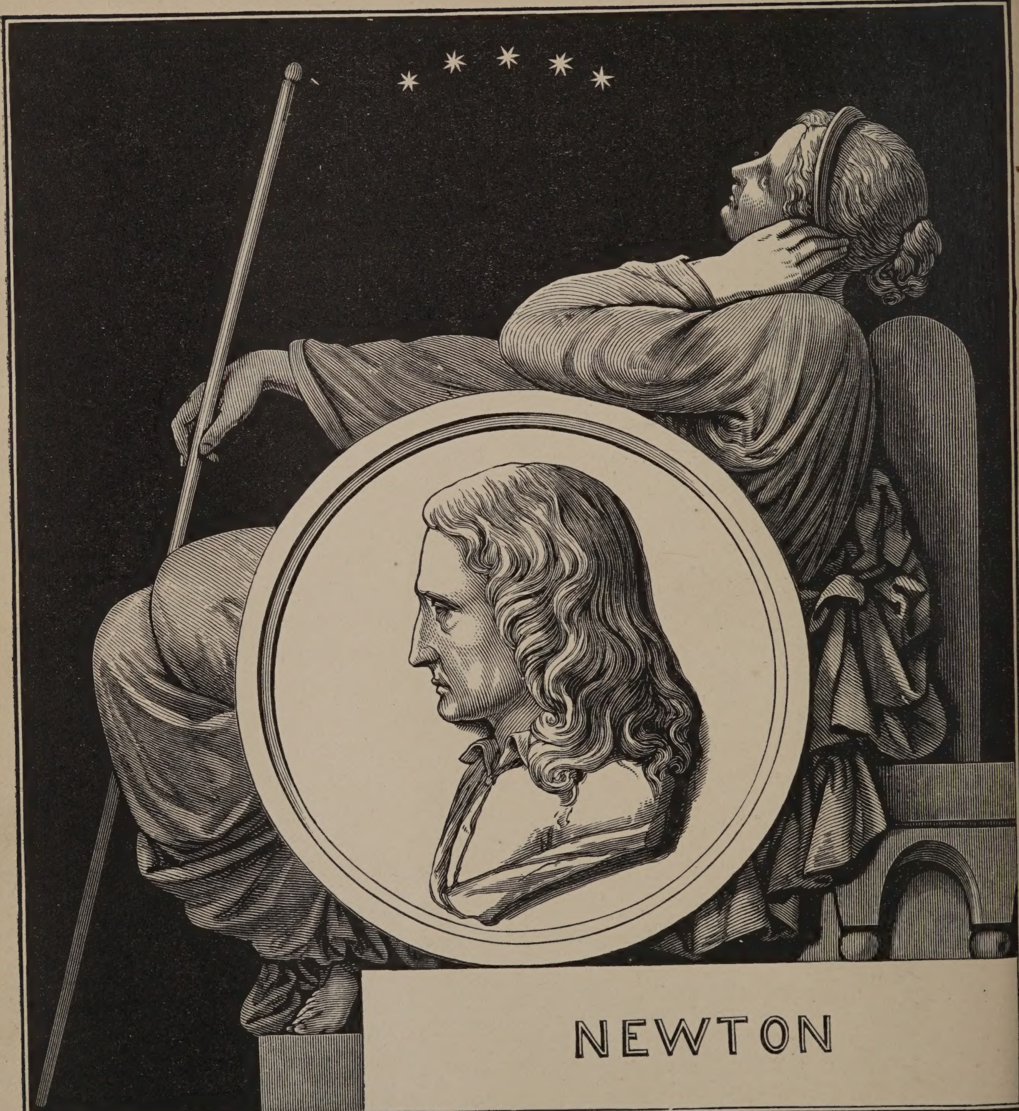
"The results that followed were shown by certain Government 'returns.' I may barely allude to them. But it was easy to calculate the immense saving to the State, as a consequence of the absence of crimes and the scarcity of prosecutions. Compare 1837 with 1841. In the one year there were 247 homicides, in the other 105; robberies, 725 — 257; robberies of arms, 246 — 111. In 1839, the number of 'committals' was 12,000; in 1845, the number barely passed 7,000. In 1839, 66 persons were sentenced to death; in 1842, the number was 25, and in 1846, 14. In 1839, 916 persons were sentenced to transportation; in 1846, 504. And as to the duty on spirits, the 'loss' to the revenue was large. In 1839, duty was paid on more than 12,000,000 gallons of whiskey, to say nothing of that which paid no duty. In 1843 and 1844, the amount was much less than half. Naturally and necessarily the State gained more than it lost, indirectly and directly. The material prospect of Ireland was augmented in a hundred ways; and the money saved, when not laid by, was expended in such manufactured luxuries as warm clothing, feather beds, 'stocks of furniture,' tea and coffee and sugar. No doubt vested interests were terribly interfered with; distillers were ruined; among others, the brother of Theobald Mathew, who followed that accursed calling. 'Change your trade,' wrote the priest to the distiller, 'and turn your premises into factories for flour.' Landlords who had let their houses to publicans had to lower their rents or do without any; the doctors had little to do, and the lawyers less; faction fights became rarities; fairs and 'patterns' were made 'lonesome;' emissaries from secret societies were in despair, — Father Mathew 'proclaimed' them as 'full of danger, of vice, of iniquity.'

"His work was immense — that is a poor word to describe his labors — from the day he began it to that of his removal. Within two years after the memorable 10th of April, 1838, Father Mathew had travelled through every district of Ireland, had held meetings in all the towns and in many of the villages, and the pledge had been taken by upwards of two millions and a half of the population. That was not all: he visited England and Scotland, and spent two years working among his countrymen in the United States. In truth, his labor was superhuman; the good he did, incalculable. At length his physical strength gave way; 'the brain o'erwrought,' the continual toil, travelling often night and day, taking little rest, especially the perpetual anxiety which those only *with restricted means and great needs* can rightly estimate, told terribly upon his constitution. There had been no self-indulgence to weaken, no luxurious ease to create rust; his was that precious gift, — a healthy mind in a healthy body; and so he was enabled to do the work, not of two, but of ten. He said he would 'die in harness,' and he did. Even after a paralytic seizure he gave the pledge to thousands; and when he had succumbed to an attack of apoplexy and lay on his death-bed, he could hear the penitent, and with crippled hands make the sign of the cross!

"Alas! the blessing of temperance in Ireland is but a memory; the people of Ireland have forgotten its apostle and martyr, and the curse is as foul and fatal to-day as it was before that memorable morning of April, 1838. Not quite: it never can be so; for drunkenness instead of a glory has become a reproach. That is, at all events, the bequest of Father Mathew to his country and to mankind, the value of which time cannot lessen. The drunkard now, instead of brawling in triumph all the way from the public to his home, skulks through byways, and prefers that his neighbors do not see him. A gentleman drunk is now as rare a sight in Ireland as it is in England. What pictures I might draw, to illustrate Ireland as I knew Ireland sixty years ago! The evils of intemperance and the advantages of temperance have been shown in many ways. A ban has been put upon the vice; authors do not describe it as venial or jovial or 'glorious;' artists no longer class it with the picturesque; the pulpit and the platform assail it with the language of abhorrence; it is execrated as the mighty impediment to social and moral progress; while the religious 'of all denominations' beat it down as the barrier that outrages nature, leads from God, and infers a social hell here and the hell of remorse hereafter. Yes! another generation will find it hard to credit, and be very reluctant to believe, that a dozen of the representatives of Irish men, women, and children in Parliament have striven, by means monstrous and wicked, to continue and uphold THE CURSE! I will not write of these Irish representatives in words I should of myself apply to them; I will rather use the language 'Father Mathew' would have used,—'God have mercy on them and forgive them!'"

IV.

PHILOSOPHY AND PATRIOTISM.



SIR ISAAC NEWTON.

SIR ISAAC NEWTON.

[BORN 1642. DIED 1727.]

IN a lecture on the Growth of Hypotheses, which Professor Whewell gave some years since at the Royal Institution, he traced the gradual development of the theory of gravitation from its crude beginnings to its ultimate form. The greatest achievements in science are seldom, if ever, the result of the labor of an individual mind. The most important truths have generally been dimly foreseen, and perhaps partially formulated, by pioneers in science, whose glory is afterwards eclipsed by the greater lustre of the master mind who grasps a subject in its totality, and makes one section of human inquiry a lucidly defined and finished piece of work. In that lecture the learned professor showed how the hypothesis was gradually approached by the mental steps of Kepler, Galileo, Borelli, and Descartes, but, nevertheless, that it was left comparatively chaotic till Newton brooded over it and said, "Let there be light, and there was light."

When every abatement, however, has been made from Newton's share in the working out of the theory of universal gravitation, there yet remains a titanic achievement before which the minds of more than ordinary mortals may well be dumfounded with amazement. Newton's was a mind which could never rest upon a mere nebulous notion; all that he turned his mental gaze upon was resolved into an ordered and well-defined system. If he were not the first to conceive the true mechanism of the universe, it was his great glory to have invented a method of testing its truth, to have created the mathematics and geometry of the science of motion which enabled him to verify the hypothesis, and to be the first to announce its most important laws.

From that fortunate moment when Newton pondered over the fall of an apple the fate of astrology was sealed. We can scarcely realize in this year of grace what a Goliath of superstition was slain by that pebble, the "Principia." We must probe the history of the times immediately preceding Newton's before we can obtain any adequate notion of the mischievous effects of astrology on the human mind, and the impediment that it was in the way of progress. Newton, with unerring aim, slew occult philosophy at a cast. From his day the intellectual field was freed; physical science became possible, and has ever since gone on conquering and to conquer. Still we must at all times beware of hero-worship, and especially of the tendency to believe our great philosophers to be intellectually infallible. To the public mind the name of Newton is probably more frequently associated with the theory of light, and more especially with that beautiful experiment with the prism which was supposed to illustrate the decomposition of light, and to confirm beyond all dispute the hypothesis of "emission" which he himself had propounded. It is, however, curious and instructive to note that Newton rejected that very *undulatory* hypothesis which has since become the accepted theory, — a theory which, on account of his adverse opinion, was condemned in no measured terms by his contemporaries. This circumstance, though it may not adorn the tale, at least points a moral. But certain characteristics of Newton, which we shall presently have to notice, will lead us to think that he held his hypothetical views upon "light" quite tentatively, contenting himself with giving to the world only, as positively ascertained facts, the results of his experiments.

The habit of thinking was so strong with Newton that it entirely abstracted his attention from other matters, and confined his mind for the time being exclusively to one object. Thus we know that he never was occupied at the same time with two different scientific investigations. And we find even in the most beautiful of his works the simple yet expressive avowal of the disgust with which his most curious researches had always finally inspired him, from his mind being continually and for a long time directed to the same object. This accounts for that absence of mind which was one of his most noticeable characteristics, and for that seemingly intentional secrecy and delay in publishing his discoveries which in several instances jeopardized his title to priority; as, for instance, when Mercator's "Logarithmotechnia" was published, in which was revealed a method of obtaining the quadrature of a curve by expanding its ordinate into an infinite series, — a method which Newton had previously discovered and formulated in a manuscript long since stowed away, and which he had almost forgotten. A copy of Mercator's work, however, having been forwarded to Newton, its perusal reminded him of his own earlier discovery, and caused him to make search for that particular manuscript among his papers. This was the treatise, "Analysis per Æquationes Numero Terminorum Infinitas," — the very treatise which so astonished Barrow by the wealth of the analytical discoveries which it contained, and which were of far greater importance than the particular one revealed by Mercator, and which was at the moment exciting such general admiration; but at the time when Mercator's work appeared, a new series of discoveries of a totally different nature had taken hold of and entirely engrossed Newton's thoughts.

Another and a very commendable motive of Newton's for laying an important investigation on one side was the discovery of a discrepancy between his hypothetical views and the observed facts; — as was at first the case with regard to the grand hypothesis of universal gravitation which had dawned upon him on noticing the fall of an apple; for in his calculations made upon the imperfect data which then existed, he found that they gave for the force that retains the moon in her orbit a value greater by one sixth than that which results from her observed circular velocity. This difference, which doubtless to any other person would have appeared very small, seemed to his cautious mind a proof sufficiently decisive against the bold conjecture which he had formed; and so this speculation was laid aside for years till a fortunate accident revived his interest in it. Being present in June, 1682, at a meeting of the Royal Society in London, the conversation turned on a new measurement of a terrestrial degree recently executed in France by Picard, and much credit was given on the occasion to the care taken in rendering it exact. Newton, having noted down the length of the degree obtained by Picard, returned home immediately, and, taking up his former calculation of 1665, began to recompute it from the new data. Finding, as he advanced, the manifest tendency of these numbers to produce the long-wished-for results, he suffered so much nervous excitement that, becoming at length unable to go on with the calculation, he entreated one of his friends to complete it for him. This time the agreement of the computed with the observed result was all but complete, and Newton ceased to doubt, after having been during so many years kept in suspense, about the eminently important law that attraction diminishes inversely as the square of the distance; and no sooner had he recognized its truth, than he penetrated instantly to its most remote consequences, and pursued them with a vigor, a perseverance, and a boldness of thought which till that time had never been displayed in science. Indeed, it seems hardly probable that it will at any future time be the destiny of another human being to demonstrate such wonderful truths as these, — that all the parts of matter gravitate towards one another with a force directly proportional to their masses, and reciprocally proportional to the squares of their mutual distances; that this force retains the planets and the comets round the sun, and each system of satellites around its primary planet; and that by the universally communicated influence which it establishes between the material particles of all these bodies it determines the nature of their orbits, the forms of their masses, the oscillations in the fluids which cover them, and, in fine, their smallest movements, either in space or in rotation upon their own axes, and all conformably to the actually observed laws. The finding of the relative masses of the different planets, the determination of the ratio of the axes of the earth, the pointing out the cause of the precession of the equinoxes, and the discovery of the force exercised by the sun and moon in causing the tides, were the sublime objects which unfolded themselves to the meditations of Newton, after he had discovered the fundamental law of the system of the universe. Can we wonder at his not being able to complete the calculation which was leading him to a conviction that the discovery was achieved?

Though England may regard Newton as one of her own special glories, his benefaction was not to her only, but to the world. It was one of which every civilized community could avail itself; none could monopolize it. The steam-engine was for many years monopolized by England; but the "Principia," as soon as published, became the common right of the nations. Newton's were labors for which wealth could scarcely be expected in a very material community; but, strange to say, he reaped a competence and a knighthood, perhaps rather for superintending the stamping of the coin of the realm than his country with the impress of his own genius.

Newton was born at Woolsthorpe, in Lincolnshire, December 25, 1642 (O. S.), the year in which Galileo died. From early youth he manifested an ingenious mechanical turn, and a taste for drawing and painting, He entered Trinity College, Cambridge, in 1660. The method of fluxions, the theory of universal gravitation, and the decomposition of light — that is to say, the three grand discoveries which constituted the glory of his life — were conceived in his mind before his twenty-fourth year, and no work of any great import was attempted after his forty-fifth. The "Principia" appeared complete in 1687. He was elected President of the Royal Society in 1703, and was knighted by Queen Anne in 1705. He was twice in Parliament, in which, however, he made no great figure, and died in London, March 20, 1727.[1]

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[1] Sir Isaac Newton's house and observatory in St. Martin's Street, Leicester Square, were till within a few years intact; since then the observatory has been barbarously deposed and carried off, — it is supposed to America.

ROGER BACON.

[BORN 1214. DIED ABOUT 1292.]

IN a century notable for intellectual and literary activity, the name of Roger Bacon stands distinct and alone. While his contemporaries, Thomas Aquinas and Bonaventura, were merely theologians, and Albertus Magnus, though a student of natural science and mathematics, essentially a man of his own century, Bacon aimed at all attainable knowledge with an insatiable vigor of application that astonished his contemporaries, and made discoveries which are among the scientific material of the present time. His ideas, his estimate of the age in which he lived, his regard for the kind of scholarship then held in the highest repute, and his own methods of study, place him intellectually among the best scientists of modern times. All other scholars of the thirteenth century — the schoolmen, as they are called — were content to build upon the lines laid down by Aristotle or Plato, dividing themselves into the once famous classes of Nominalists and Realists, waging an interminable war of words, and shedding the contents of numberless inkhorns over the most trivial wrangles. The real topics at issue between the irreconcilables of either party were, after all, mere questions of standpoint. The belligerents would insist on looking in opposite lines of sight at certain abstract conceptions which with marvellous ingenuity had been deduced from the writings of the two Greek masters; and the result was endless quibbling, much philosophic rancor, and a general mill-horse kind of progress in the subjects thus quintessentially investigated. Bacon was one of the very few scholars of the thirteenth century who saw and despised the emptiness of the scholastic philosophy. As parts of a merely formal science, good for disputations and well adapted for

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university wit-sharpening, the developments of the various Angelic, or Seraphic, or Subtle, or Irrefragable doctors were all that could be desired; but to the soul hungering for real knowledge, for insight into the ways of God with man, for a rational acquaintance with natural laws, they were emptier than the wind. It is a singular though trifling coincidence that the great inductive philosopher of the sixteenth century should be called Francis Bacon, and that the so-called Baconian philosophy should be virtually identical with that propounded by the mediæval Franciscan.

Roger Bacon was born at Ilchester, in Somersetshire, in 1214. After making extraordinary progress in the regular studies of the monastic school and the University of Oxford, where he was taught by the distinguished scholar, Edmund Rich, afterwards Archbishop of Canterbury, he proceeded to Paris to complete his education. Here he distanced most of his competitors, but was ever discontented with the vanity of his literary acquirements. His opinion of the Aristotelian logic was that it simply tended to promote and propagate ignorance. He was immeasurably more strongly attracted by the charms of physical research.

The secrets of nature were to him the only secrets worth investigation. And his works still extant clearly show that he had the right method of study, especially that extraordinary book which cost him so much toilsome research and so vast an expense, the "Opus Majus." Not that his method was nearly as complete as the "Novum Organon" of his great namesake, but it was certainly more profitable than the "Vetus Organon" of the master of the mediæval world. Without detracting from the grandeur and completeness of conception and arrangement which mark the Aristotelian logic, it must be admitted that the interpretation of nature, considered by all philosophies to be the proper function of human intelligence, is much more probable when attempted through the observation of natural phenomena than through the formularies of *Barbara celarent darii* and the rest of the jargon, not inaptly rounded off with the grandly sounding *ferio baralipton* of Molière's "Bourgeois

Gentilhomme." A physical science which could deduce its facts from foregone conclusions was not the science to satisfy the mind of any true lover of nature. It is no little credit to the University of Oxford that in the middle of the thirteenth century she could produce men like Bacon and Robert Grosseteste and Richard Fishacre, — men who were not bound by the little circle of dialectic subtleties, but who had made substantial progress in good practical knowledge of material things. At that time Paris was held to be the leading university in Europe, and when Bacon repaired thither it was with the hope of obtaining the best teaching that could possibly be had. He obtained the degree of doctor in theology, the highest the university could afford; but he returned to Oxford dissatisfied and disappointed. It is generally said that he entered the fraternity of the Cordeliers, or Minorites, as the Franciscans are variously called, while he resided in Paris.

His by-name of the Wonderful Doctor was won through his marvellous novelties in physical science. His devotion to this branch of research was constant and unwearied. In twenty years, which he spent with the most assiduous industry in collecting facts and making experiments, he gained the title of magician, and expended upwards of two thousand French livres of the period, upon books, instruments, and lectures. And believing that there should be the closest connection between science, literature, and religion, he studied thoroughly the Latin, Greek, Hebrew, and Arabic languages, in order that he might read the masterpieces of the ancients in the original tongues. With Plato, he looked upon mathematics as the true keystone of the sciences. He was the first to point out the accumulated errors of the Julian calendar, and in 1264 proposed to Pope Clement IV. to rectify the calculations. A copy of his corrected calendar is still preserved in the Bodleian Library.

In optical science not only does he point out the chief facts of refraction and other cognate phenomena, but he applies his knowledge to the construction of lenses. He made spectacles, he says, for the use of the aged. In geography he mastered all that was then known, and threw out several very shrewd conjectures with regard to facts only verified since his time.

But all his knowledge, so far from placing him in his own age on the pinnacle of fame and loading him with wealth and honor, only resulted in disappointment, misfortune, and loss. Knowledge so uncommon and talents so brilliant as to be beyond the comprehension of his fellow-monks were dangerous possessions. His somewhat inflated language — a fault due in part at least to the Latinity of the schools — drew upon himself the jealousy of the brotherhood to which he belonged. His pretensions were narrowly scrutinized, his character impugned, and at length he was solemnly charged with atheism and imposture.

It was not altogether owing to his reputation for magical and astrological acquirements that Bacon was opposed and even persecuted by his own order, nor was it altogether the result of jealousy. It might be, and indeed was, the case that in consequence of some suspicion as to his faith he was prevented from reading his lectures to the younger students of the university; but there is good reason to believe that he urged his views with regard to the ignorance and immorality of both monks and clergy with very much more zeal than discretion. This was probably the true cause of both his inhibition and his imprisonment. In 1266 the Pope, Clement IV., to whom he had sent some specimens of his labors, wrote to him desiring to see the whole of his work. To oblige that potentate, therefore, he at once collected, enlarged, and completed his various treatises, and sent them by one of his own scholars to Rome. The collected works thus united into one whole he styled his "Opus Majus," or "Greater Work." It is still extant, and was edited and published by Dr. Jebb in 1773. Twelve years afterward the work was completed. Bacon was imprisoned by order of the general of his order, as some say on account of certain treatises on alchemy which he had written. It is added that this same general afterwards set him at liberty and became his scholar. We must not be too ready, however, to accept the various tales that are told of the wonderful friar; for his life formed one of the marvellous "chap-books" which used to be so popular among the poorer class of readers. Eventually he was released, and applied his remaining days to the composition of his "Compendium of Theology," his last work, a manuscript copy of which exists in the Royal Library in the British Museum. He died in the college of the Franciscans at Oxford, on the 11th of June, 1292 or 1294, — it is not certain which year, — and was buried in the Franciscan church.

He was beyond doubt the most extraordinary man of his time. He possessed critical skill in the three learned languages, and, had he never been famous for scientific attainments, would have attained celebrity as a linguist and a theologian. But his great misfortune seems to be that he lived too soon. Born some three hundred years before Galileo, it is easy to see how his profound and accurate scientific knowledge could not be understood or accepted by his contemporaries. He excelled in mathematics; in mechanics no such genius had arisen since the days of Archimedes.

Every school-boy knows the story of the brazen head, and the stupid wonder of the poor monk who heard the marvellous words, "Time will be, — time is, — time is past." The "chap-book" tells the story. But his skill in astronomy was still more remarkable; for, as already mentioned, he was the first to detect and to *correct* the error in reckoning which had crept into the calendar. His plan of correction was much more complete and accurate than the one actually adopted in the pontificate of Gregory XIII. His historical works were voluminous and exhaustive; but the knowledge which was most appreciated, and at the same time feared, in his own day was that of chemistry. He was thoroughly acquainted with the discoveries of the Arabians in that department of science. Whatever other persons may be credited with the discovery of gunpowder, he certainly was acquainted with its composition and its effects. The art, so called, of transmuting metals of course formed part of his researches, and also the composition of that tincture of gold which, under the name of the *elixir vitæ*, was hoped to be a complete panacea for all ills, and even

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a defence against death itself. To those who desire to drag on an interminable mortality in this present unsatisfactory human world, the recent claims of lemon-juice are perhaps equally convincing. But if Bacon had some of the follies of his contemporaries he was by no means singular; his very slight faults in this respect are more than atoned for by the infinite excellence of his labors for the furtherance among mankind of sound, accurate, and practical knowledge. He had the greatest reverence for the Holy Scriptures, and carefully studied the languages in which they were written, under the impression that they contained all true science and the elements of all useful knowledge, — an opinion of the Bible that is not yet extinct. Apart, however, from his weaknesses and errors, of which few were merely personal, sufficient is still related of him to show his undoubted claim to rank among the true benefactors of mankind.

JOHN LOCKE.

[Born 1632. Died 1704.]

THE habit of forming hasty generalizations is perhaps at the foundation of most of the differences of opinion which affect society. It is encouraged largely, no doubt, by language itself; for putting aside all such words as are employed in the merely grammatical mechanism of speech, many of those which are employed as names, instead of being the names of real things, or thoughts or sensations mental and physical, are merely the names of imaginary or fictitious ones. Or if they do really denote true, substantial objects, those objects are not the ones which the speaker believes them to be. Thus, in one way or another, false conclusions are reached at times by everybody. Nor practically can it ever be otherwise. People have not time to go sifting and refining and testing and analyzing all their words for the sake of an ideal super-angelic perfection. Hence it may be confidently relied upon that doctors will always disagree. Opinions will always differ. Even if reasoning were perfect, things would still be looked at from different points of view. Hence a system of morals or philosophy which should claim the consent of all mankind is utterly beyond humanity. Nevertheless it does certainly seem possible that if the so-called philosophers would condescend to talk about what they thoroughly understand, in language which their hearers also may thoroughly understand, and leave all the rest unsaid, the world of earnest thinkers would be brought considerably nearer unanimity than they are at present.

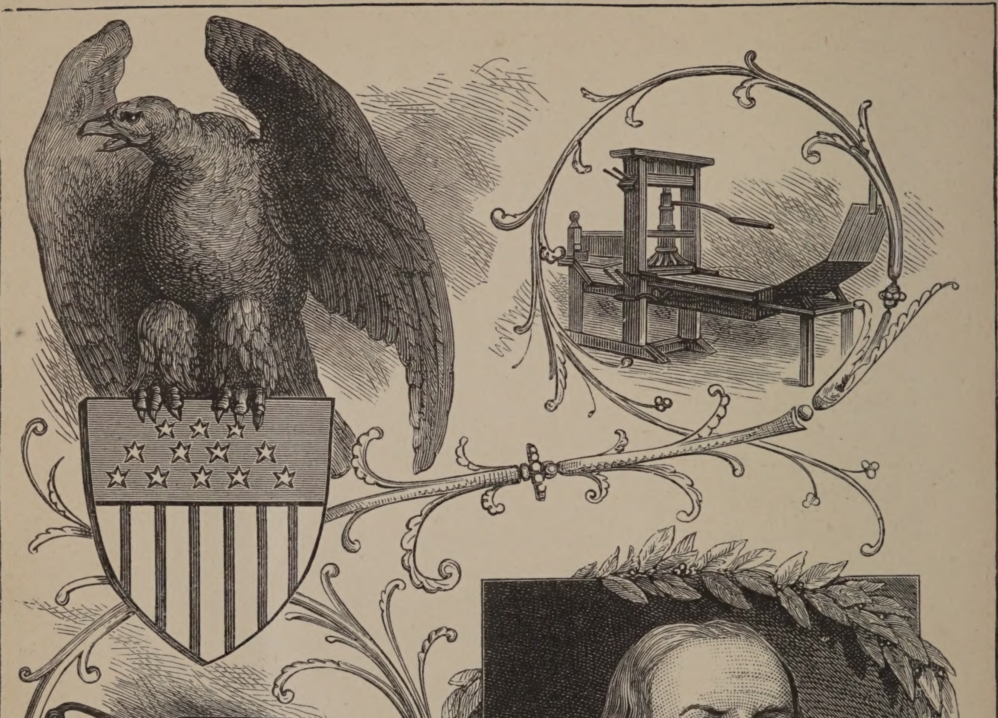
It was the opinion of John Locke that knowledge would have been very much more advanced if the endeavors of those who sought after it had not been much cumbered with the learned but frivolous use of uncouth, affected, or unintelligible terms. Hence it may be inferred that in the philosophic sense — and, let us add, in this sense only, not in the religious, as is commonly, but unthinkingly, supposed — John Locke was a sceptic. The one characteristic of his mind above all others was clearness. The mischief of philosophy is not that philosophers cannot see as plainly as other men, but they imagine they can see where they really cannot. It was Locke's virtue to avoid this Charybdis; not that there was no Scylla for him to wreck upon, but he at least did not endeavor to conceal a void by making it a darkness. The endless disputations of philosophers led him to suspect that they were misled by indefinite words or defective conceptions; so he proposed to clear away these metaphysical mists by distinctly ascertaining the grounds and limits of human knowledge. He commenced by an investigation into the properties of the human understanding. He worked out his idea in a masterly treatise, distinguished for its equal modesty, tolerance, and acuteness. Like Bacon, he preferred the method of experiment to that of speculation, and applied that method to the investigation of our inner nature. It will give us an interesting glimpse perhaps into the growth of his opinions, if we follow him from the university. He was born at Wrington, near Bristol, in 1632, and was the elder of two sons. His father had served as captain in the Parliamentary forces during the civil wars, but, having succeeded in retaining a portion of his estates, was able to bring up his sons with liberality. The future metaphysician was accordingly sent to Westminster School, whence in due time he passed to Christ Church, Oxford. He had always expressed a fondness for medical studies, and had so far progressed in the science of medicine on leaving college as to obtain the public praise of Sydenham. The profession of medicine, however, was robbed of an ornament in Locke by the offer of an appointment, in 1664, as secretary to Sir Walter Vane, envoy to the Electoral Court of Brandenburg. Similar appointments on his return in the following year were offered, but declined. Among the many temptations held out to him was the offer of church preferment in Ireland if he would take orders. "I am sure," he says, in reply to the Duke of Ormond, who made the proposal, "I cannot content myself with being undermost, possibly the middlemost, in my profession; and you will allow, on consideration, care is to be taken not to engage in a calling wherein if one chance to be a bungler there is no retreat."

So he settled again in Oxford, where he made the acquaintance of Lord Ashley, afterwards Earl of Shaftesbury. The acquaintance ripened into an intimacy which lasted very nearly to the end of his life. In the course of their truly fraternal friendship they passed their time chiefly between Exeter House, in the Strand, and Oxford, in both places meeting and mixing with the most distinguished men of the age. It was after many conversations with society of this character that, in 1670, he threw out the idea of his "Essay on the Human Understanding." And doubtless it was owing to the difficulty which Locke found in pressing the truth of his principles in conversation that he determined to put his conclusions into writing. Encouraged by his friends, he worked out the project so rapidly and with such fulness that in the course of a year he had it completely in shape. The essay was, however, kept in manuscript for many years. At the university he had devoted himself chiefly to classical studies, but the classics had not entirely taken up his thoughts. One of his favorite authors was Descartes, whose exceedingly clear and attractive writings inspired him with ardor for the cultivation of metaphysical studies. The theory of Innate Ideas was the one point on which he did not hold with the illustrious Frenchman; but for the most part he was captivated with his mathematical distinctness and simplicity. Locke contested the hypothesis of Innate Ideas, and endeavored to prove by the Baconian inductive method that all our representations are acquired by experience. The two ultimate sources of all our representations he maintained to be impressions through the internal senses, and reflection, which he termed an internal sense, being an internal perception of the operations of the mind. This caused his system to be called one of Sensationalism. The details of this system, of course, are too extensive to be dealt with in our present limits. But his oft-quoted doctrine that the soul, like a piece of white paper (*tabula rasa*), merely receives the impressions of the two sense-faculties of perception and reflection without adding anything thereto, forms the basis of his theory of Education. He originated many striking suggestions with regard to language, and gave a definition of knowledge which at any rate is clear, distinct, and comprehensible. He defines knowledge to be the perception of the connection and agreement, or want of connection and agreement, between certain representative ideas. We see at once that this definition is one to which universal assent cannot be given, since he describes the principles of thought and knowledge to be all derived and secondary. He deduces all knowledge from experience, but his analysis only touches its material part. He leaves out the very question which causes all the uncertainty and dispute, namely, the *formal* part, — that apparently unknowable link between the known and unknown which is at once our human pride to possess and our humiliation not to comprehend. Hence, as Tenneman says, " he maintains the possibility of a demonstrative knowledge of the existence of God and the Immortality of the Soul, and endeavors to erect a system of metaphysics on the uncertain foundation of empirical knowledge." Here was the Scylla on which he split.

Locke's great object, according to his own statement, was to inquire into the origin, reality, limits, and uses of knowledge; and in order to render this investigation profitable, his aim, in the first place, was to liberate philosophy from the vain and endless disputations and barren hair-splittings which had characterized its profession from the times of mediæval scholasticism. The new theory gained adherents through its very common-sense plausibility. Thoroughly exhausted, flat, stale, and unprofitable had become the old method of philosophizing. Locke came in with his system as a plain and definite theory to account for the generation of thought. His sensationalism is, at any rate, not the purely theoretical sensationalism of his imitator Condillac. It is true that the doctrine of Locke ignored the existence of all ideas involving the notions of universality, necessity, and infinity, looking upon necessity as generality, and upon infinity as immensity, and reducing them to mere negations, or things having no known limits. By affirming the necessity of reflection as an essential part of the cognitive faculty, Locke at least left room for human liberty, for a will, and for a personal conscience; but Condillac, by his so-called simplification, dispensed with reflection and traced all knowledge to sensation alone. Thus Condillac reduced mind to a mere bundle of sensations; but not even he sounded the lowest depths of this "facilis descensus." It was left to Cabanis to touch the very floor of the abyss, and to bring metaphysics within the region of material physiology. To say that the opinions of the last of the encyclopædists form the basis of our present advanced physiological theories of mental structure, would perhaps be going too far; but it is ground on which we do not think it either wise or profitable to tread in this connection. Locke believed the freedom of the understanding to be undermined by the Innate Idea theory of his favorite master, and he set himself the task of opposing it with a theory of his own. The theory was this, — no authoritative belief exists in the mind which has not an origin in experience. He could not conceal from himself the conviction that the most extensive human beliefs were shaped and tinged by the varying experiences of the nations and individuals who held them. Hence his own faith in his experimental doctrine of knowledge. Leibnitz had still to write that masterly critique, "Nouveaux Essais sur l'Entendement humain;" and so the weakness of his theory had not been brought home to him. Nor had Kant as yet added to the intuitional doctrines of Descartes their strongest confirmation by his strict definition of the domain of that essential faculty. Locke's philosophy was practical. His theory was devoted to a thoroughly practical and English object. He was no hair-splitting dogmatist, but a clear-headed earnest thinker who aimed at a manageable, definite, and universally practicable method; and if he omitted certain occult elements in metaphysical inquiry it was with the avowed purpose of producing a lucid and tangible system, free from the wearying uncertainty and mystification of the conflicting systems which, as a thinker, it was his misfortune to inherit.

In 1683, owing to political troubles in which Lord Shaftesbury became involved, both he and his patron retired into exile in Holland. In doing this he incurred the displeasure of the English Government, and was deprived by royal mandate of the studentship which, equivalent to a fellowship in other colleges, had been his chief means of support. Thus, in the language of Fox, "without the shadow of a crime, he lost a situation attended with some emolument and great convenience, and the university was deprived of — or rather thus, from the base principles of servility, did she cast away — the man the having produced whom is her chiefest glory." It was, no doubt, owing to this exercise of paltry tyranny and injustice that Locke was provoked to take up the decided position which he afterwards assumed as a political writer, and to put forth his celebrated "Letters on Toleration." The first letter, written in 1687, was published twice in London during the year 1690, the year in which first appeared his other and still more celebrated treatise, the "Essay on the Human Understanding."

The Revolution enabled him to return, not only to England,



BENJAMIN FRANKLIN.

but to his studentship at Oxford. But his life, though still busy with incessant occupation of one kind or another, was drawing to a close. He lost his friend Lord Shaftesbury; and though the place was somewhat filled by the Earl of Pembroke, to whom he dedicated his great work, Locke seemed to have suffered an irreparable loss. His health, never very strong, began to give way. In 1695 he published his "Reasonableness of Christianity," and a short commentary on the Apostolic Epistles. The spring of the year 1704 came without bringing its accustomed renovation to his wasting frame. In a letter written on the 1st of June to Mr. King, he plainly stated his conviction of the near approach of death. Almost his last words were, "that he had lived long enough, and that he thanked God he had lived a happy life; but that, after all, he looked upon this life to be nothing but vanity." He died on the 28th of October, 1704.

BENJAMIN FRANKLIN.

[BORN JAN. 17, 1706. DIED APRIL 17, 1790.]

IN how many autobiographies shall we find the story of a lengthy and well-spent life so modestly told as in that of Franklin? The celebrated philosopher carried his avoidance of self-praise to a pitch that leaves the reader half inclined to censure him. Not content with setting down his faults in full, he all but omits the history of his labors, and leaves his virtues wholly to the record of others. The book that Benjamin Franklin, the statesman and scientific discoverer, gave to the world, does little more than describe the fortunes and misfortunes of Benjamin Franklin the journeyman printer. When the writer has reached that point in his career where years and honors began to fall heavily on him, he abruptly ends. He felt as all men truly great must feel. The seedtime of his life he might himself be permitted to describe; the harvest that he reaped had best be enlarged upon by the pens of others.

Franklin at eighteen and Franklin at eighty are contrasted with all the sharpness of effect in which Dame Fortune sometimes delights. In 1723 the future ambassador to France and signer of treaties entered Philadelphia in search of work, having left home to escape from the tyranny of a brother. Dressed in rough workman-fashion, and bearing legibly about him the marks of hardship and long travel, he could scarcely be accounted a youth whose condition and prospects augured eminent success in life. Of the money that had been in his purse at starting, a single dollar was all that remained. Going into a baker's shop, he spent part of this slender capital in the purchase of three large rolls. "I had often made a meal of dry bread," is his quiet comment on the circumstance. A roll under each arm, and eating the third, he walked forward through the streets of the town, and was seen, as he passed her father's door, by the girl destined to become his wife. Their love was not born of this first sight; for the figure he cut seemed to her both awkward and ridiculous.

Sixty-two years later he re-entered Philadelphia. Very different was this last visit from the first. The streets were splendid with decorations, and crowded with citizens eager to welcome him. He was now the man whom, next to Washington, Americans delighted to honor. As commissioner at the Court of France, he had brought to a successful issue the difficult and delicate mission intrusted to him. His scientific reputation was European, and his "Poor Richard's Maxims" were in the hands, as well as the mouths, of all his countrymen. And therefore, putting aside for the moment republican simplicity, the inhabitants of Philadelphia received with almost royal honors the man whose abilities and achievements were accounted extraordinary throughout the civilized world.

Such prosperity had no ill effect upon the subject of it. Sagacity, sound common-sense, and energy were the features that, above all, distinguished the character of Franklin. To however difficult a pass life might bring him, he had, in general, sense to discern the right road and strength to follow it. This long gap of sixty-two years we can but imperfectly fill up in this article, for it covers the important period connecting the first foreshadowing of the American revolt against Great Britain with achieved independence. And in all this Franklin bore so honorable and conspicuous a part that the narration alone would demand many pages for the most concise presentation of those events with which his career is associated. We may say, however, since brevity is thus imposed upon us, that if he is not the First American, Franklin's title to be considered the Second will hardly be contested by the best judgment of his own countrymen. In any definition of the misused phrase, Franklin was a great man. Whether the having raised himself, by the force of his own talents, from poverty and obscurity to a commanding position among his contemporaries, shall be accepted, — and this is the world's estimate of greatness; or whether a more impartial consideration of what he actually accomplished for the good of mankind shall make up the verdict; or whether those splendid natural gifts which enabled him to grasp, and in no small measure to influence, the course of public events, shall confirm the decree, — Franklin's place in history is secure. It is unique. There is nowhere a more forceful example of what a man endowed with brains, energy, and sagacity may achieve. Franklin possessed all these. Step after step, the tallow-chandler's son ascended the ladder; but he began at the foot, and he never stopped until he had reached the topmost round.

Franklin's parents were too poor to give him a liberal education, too humble to look beyond the lowliest pursuits for a career. The boy could go to school only when he was not wanted at home. But these deficiencies were made good by the boy's own intuition that knowledge was power, and his dogged determination to possess it at any cost. He read everything that he could lay hold of, wrote out his thoughts upon what he had read, compared, analyzed, pondered, disciplined his mind and hand, until he had acquired that clear, pure, concise, and solid style which distinguishes everything that emanated from his pen. Addison, he tells us, was his literary model; and certainly Franklin's state papers, his public and private correspondence, his philosophical essays, show that he was no unapt pupil of this great master of style. In everything else the pupil surpassed the master.

When Franklin was twelve years old he was bound as an apprentice to his brother James, who in a few years started a newspaper in Boston, Franklin's native town. The lad first tried his hand at writing ballads, which were printed and hawked about the streets, and had a great sale, although he tells us in his Autobiography that they were wretched stuff, — mere "blind-men's ditties." Growing bolder, he wrote anonymous pieces upon current topics, which were slipped under the door of the printing-office, and were printed in the paper without a suspicion on the part of any one that the quiet boy who stood over the press, inking the forms, was the author. Thus, in the midst of the most irksome drudgery, made worse by his brother's harsh treatment, Franklin's mind steadily developed; for, hard as the labor was, and meagre as was the pittance doled out to him, the boy let no opportunity slip to store his mind with the information thus thrown in his way. And opportunity, we may say, makes the man. This brings Franklin's life up to the first period we have spoken of, when he left his native city to better a condition which could hardly have been worse, while to him it had grown too intolerable to be borne longer.

While still no more than a boy, the insincere promises of a pretended patron had led him to cross the Atlantic. Arrived in London, his hopes of profit and preferment vanished with the rapidity common to dreams. Many youths of nineteen would have given way to despair on finding themselves left friendless and penniless in a strange land; but Franklin, with great good sense, bethought himself of his former occupation as a compositor, and, having speedily obtained work, contrived for above a year to support not only himself but an unlucky and somewhat idle comrade who had accompanied him. While thus employed, his health and strength furnished to his companions striking lessons on the advantages of sobriety.

"I drank only water," he tells us in his Autobiography; "the other workmen were great drinkers of beer. On occasion I carried up and down stairs a large form of types in each hand, when others carried but one in both hands. They wondered to see, from this and several instances, that the 'Water American,' as they called me, was stronger than themselves, who drank strong beer." Clear-headed in youth as in age, Franklin had already discovered how graciously Temperance treats her servants, and was enlisted for life in her cause.

The years passed, and with the passage of each there came some change in the life of Franklin. He returned to his adopted Pennsylvania, and by degrees raised himself to the position of a foremost man in the colonies. In 1730 he married Deborah Read, the lady of whom the anecdote of the rolls is related. In 1752 a kite and a thunder-cloud rendered him suddenly famous. He had become convinced of the identity of lightning with electricity, and after careful meditation on the subject, succeeded in verifying his theory by the ingenious experiment so frequently described. To the upright stick of a kite he fastened an iron point. The part of the kite-string he held in his hand was of silk, the remainder of hemp; and where the hempen and silken strings met he attached a key. A thunder-cloud approached, and Franklin sent his kite to meet it. At first no signs of electricity were apparent, and the disappointed philosopher had all but abandoned kite and experiment in despair. Casting a mortified glance on his apparatus, he perceived a sudden movement in the loose fibres of the hempen string, and instantly presented his knuckles to the key. A strong electric spark was the result. The identity of lightning with electricity was established. To the world this descent of information from the clouds gave the lightning-conductor; to Franklin it brought celebrity and honors.

In 1753 Franklin was appointed deputy postmaster-general of the British American Colonies. In 1754 he was one of the delegates to the Albany Congress, and it was Franklin who drew up the plan of union for defence which became so distasteful to the British Cabinet on account of its marking out a colonial policy distinct from the narrow views of the ministry. In 1757 his growing reputation advanced Franklin to the highly honorable post of agent in England for four of the provincial governments. In an independent State this appointment would be equivalent to that of ambassador. The journeyman printer now found himself once more in London, but as the associate of the learned, the powerful, and the great. He was elected a member of the Royal Society, and he received the degree of LL.D. from the universities of Edinburgh and Oxford. He was now Dr. Franklin. In 1764 he was again sent to London; and this time his knowledge of affairs, the clearness of his views upon those grave public questions that were daily widening the breach between the two countries, gave the philosopher a prominence in statesmanship that he maintained throughout the stormy period now approaching. He had most patriotically but ineffectually endeavored to avert the calamities threatening both England and America with a rupture; but this was the period of infatuation, and so Franklin's counsel and Franklin's warning were of little avail. We may say, however, that nowhere is there to be found so full and comprehensive a view of the colonies at that time, as is contained in the minutes of Franklin's examination with reference to the repeal of that egregious piece of folly, the Stamp Act. During this residence abroad Franklin gained enlarged views of the state of Europe by travel on the Continent. There soon came an opportunity of rendering a most signal service to his country by exposing the double-dealing of Governor Hutchinson of Massachusetts, who in his letters to the ministers had been urging them to put down rebellion with the strong hand. Some of these letters, having come into Franklin's possession, were sent to Massachusetts, where their publication created intense excitement and indignation.

The time for peaceful negotiation having passed, Franklin returned to America in 1775, where his presence was needed. He was immediately chosen to the Continental Congress, taking thenceforward an active part in its deliberations and its work of meeting the crisis with vigor and effect. He favored independence of Great Britain; and when that measure was being discussed, he is said to have put the matter forcibly before the wavering members by the remark, "Come, gentlemen, if we do not hang together, we shall hang separately."

But Franklin's greatest political services were performed as a negotiator at the Court of Louis XVI. The alliance with France was owing in a larger measure, doubtless, to Franklin's tact, perseverance, and the great popularity he acquired, both with the Court and people, than to his associates, Messrs. Lee and Deane. Franklin had the proud satisfaction of putting his name to the treaty of peace which, in his view, was the only legitimate result of the Declaration of Independence. He then asked for his recall.

Full of years and honors, Benjamin Franklin returned to America to die. What he accomplished in the interests of peaceful progress should be the grateful task of his biographer to commemorate; but we must reluctantly leave these noble or charitable deeds of his with the remark which every American, at least, will appreciate: "If you would see his monument, look around you." His will contained noble provision for those institutions that he had either founded or derived benefit from, for the promotion of learning, the arts, philanthropy, and for the public good in general. His self-written epitaph expresses with quaint dignity the temper in which he looked on death. Frequently as the words have been quoted, no sketch of Franklin could be considered satisfactory that omitted them.

"The body of Benjamin Franklin, printer,
Like the cover of an old book,
Its contents torn out,
And stript of its lettering and gilding,
Lies here, food for worms;
Yet the work itself shall not be lost,
For it will (as he believes) appear once more
In a new
And more beautiful edition,
Corrected and amended
By
The Author."

A fitting hope to express itself on the tombstone of one who, having written, "The most acceptable service we can render to God is to do good to his other children," spent his whole life in practising the benevolence he preached! We shall find in the character of Franklin little that is dazzling or magnificent, nothing resembling the fiery combinations of vices and virtues that from time to time blaze across the world like meteors. His career shines with the steady light of a star; and that splendor is ever equable and serene.

SIR THOMAS MORE.

[BORN 1478. BEHEADED 1535.]

AROUND the reign of the Eighth Henry there hangs a double darkness, — the mist of centuries and the mist of blood; and historical attempts to pierce that twofold veil have proved but partially effectual. We know that two queens died on the scaffold, that the axe took away the life of noble after noble, that seventy-two thousand victims of lesser note suffered death at the hands of the executioner; and that side by side with all this tragic work went on the business and the merriment of the every-day world. Old historians, however, and the manuscript records through which patient scholars labor with untiring industry, though they furnish us pictures enough of the dark drama of the time, teach us little concerning the actors. Was Anne Boleyn a much-maligned queen or a wretched culprit? Can Cranmer claim to be venerated as a martyr? On these and a hundred other questions each fresh investigator pronounces a verdict differing from that of his predecessor, till the confusion of the epoch becomes so hopeless that a historian arises who can discern all the virtues that ever adorned a monarch in the English Nero himself. There is one name of the period, however, to the nobleness of which

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those who consider Henry VIII. a hero, and those who perceive in him a worthless scrap of human refuse lifted aloft on the tide of the Reformation, alike bear testimony. No stain of reproach has ever been cast upon the memory of Sir Thomas More.

Born of parents who could claim for themselves and their ancestors but the middle rank in life, More early gave token of the qualities by which greatness is achieved. It was customary, while the Church of Rome still held sway in England, for ecclesiastics of high rank to receive into their houses boys of good name and character, nominally as pages, but in reality to receive instruction in the learning of the time. Placed on such a footing in the household of Cardinal Morton, young Thomas quickly attracted the attention and won the regard of his patron; and with a prophecy that so extraordinarily gifted a lad would climb high in Church or State, the generous ecclesiastic despatched him to study at Oxford.

For a time Fortune seemed to have laid aside her proverbial fickleness, that she might be constant to Thomas More. He adopted the law as his profession, rapidly acquired renown, and while still a young man was returned to Parliament. Strong religious sentiments at this period held possession of his mind. He lectured on the work of St. Augustine, "De Civitate Dei;" passed much of his time in devotion; and had thoughts of retiring from the world. A pair of bright eyes fortunately interrupted the current of his meditations; and More, happy in his wedded life, gave to mankind the mind that he had all but resolved should narrow itself to the captivity of a monastery.

The publication of his great work, "Utopia," placed him high among the men of letters of the age, and far in advance of that age as a philosopher and reformer. It seems strange that a work so liberal in its tenor should have escaped the censure of the Government, stranger still that the quiet but persistent opposition of More to the despotic demands of King and Court should have failed to draw down on him the anger of the passionate Henry. Far, however, from paling, his star continued year by year to beam more brightly. In 1529 came the fall of

Wolsey. Eight days after the Great Seal of England had been taken from the unhappy Cardinal, King Henry delivered it to Sir Thomas More.

The years of his chancellorship shine out with noonday brightness from the judicial darkness of the Tudor period. After ages of corruption, England at length had for her chief judge a man who loathed the infamous practices by which his predecessors had grown rich. The hands of More were clean from bribes. Such praise would in our own time sound superfluous, if not insulting. Applied to a chancellor of the sixteenth century it became the token of an integrity at the spotlessness of which men stood amazed. Bacon himself, the greatest Englishman that ever sat on the woolsack, could not claim it.

Erasmus, the life-long friend of Sir Thomas, has left us a delightful picture of the domestic happiness enjoyed by the great Chancellor. Fortunate in a second marriage as in the first, surrounded by attached and dutiful children, More passed year after year in an atmosphere of peace, lighted by the cheerful brightness of his lambent humor. The greatness of his spirit appeared in his every action. The constant study of his life was how to temper law with equity, to deal forth equal justice to rich and poor, to prevent needless litigation, to drive cruelty and dishonesty from the judgment-seat. In his integrity, however, there was no taint of harshness. Even bribes were put from him less with a rebuke than a jest. A rich widow once brought to him at the New Year a pair of gloves stuffed with gold angels. More emptied the money into her lap. "It is against good manners," he said, "to refuse a gentlewoman's New Year gift. I will therefore take the gloves, but thou mayest keep the lining."

To the country house of Sir Thomas at Chelsea came many times the King himself. Chelsea was then a quiet village, with green fields sloping down towards the pure and sparkling waters of the Thames. Henry shared the dinner of his Chancellor, laughed without measure at his jests, and walked and talked with him in his quaint, spacious, trimly kept garden. Once the son-in-law of Sir Thomas watched the King strolling for an hour over lawn and path, his arm the while round the Chancellor's neck. Some sunbeam striking down on one of the dials then common in English gardens may have brightened into prominence the "Memento mori" gilded there; but the warning, though it impressed itself on the heart of More, escaped his son-in-law. The King departed; and, the Chancellor being again alone, his eager relative ran to congratulate him. "Never saw I our Lord the King do so to any before," he declared, "save once to the Cardinal, with whom his Grace walked arm in arm." Sir Thomas had a clearer brain, and a spirit pure from all taint of vanity. "I thank our Lord," he replied, "I find his Grace my very good lord indeed, and I believe he doth as singularly favor me as any subject within his realm. Howbeit, son Roper, I may tell thee I have no cause to be proud thereof; for if my head would win a castle in France it should not fail to go."

The stormy epoch of the English Reformation dawned. Catherine was divorced, and the diadem of queen consort passed to the forehead of Anne Boleyn. Unable to recognize her as queen, More resigned the chancellorship and retired into private life. The anger of the King pursued him. Summoned to admit the lawfulness of the divorce of Catherine, he refused. The Tower gates quickly closed on him, and his property was declared forfeited to the Crown. A year of captivity followed. The oath of supremacy had by this time been devised, and after some debate was formally tendered to Sir Thomas. A fervent and pious Catholic, he refused to acknowledge Henry as the Supreme Head of the Chuch; and the 1st of July, 1535, beheld him condemned to suffer as a traitor.

He was brought back to the Tower by the river, that majestic and placid water-way along which he must many times have passed to the beloved home at Chelsea whither he was never to return. At the Tower wharf his "best-beloved daughter, Margaret," was waiting to receive the farewell blessing of the father whose affection for her had been so tender. She broke through the guard that encompassed him; and, flinging herself upon his neck, was but able, between tears and kisses, to exclaim bitterly, "Oh, my father! Oh, my father!" More soothed her with the hope of meeting hereafter; and, bidding her be patient for his loss, blessed her most tenderly and departed slowly from her sight.

From the sight of history he can never depart. His death, as noble and courageous as his life, closed with solemn and appropriate dignity the story of a career in which from youth till age the fear of God had been displayed together with the love of man. Never did Christian pass with calmer heroism to his reward. "O death, where is thy sting?" was the triumphant question that spoke in every detail of the martyrdom of Sir Thomas More.

SIR PHILIP SIDNEY.

[Born 1554. Died 1586.]

GENIUS, like other natural forces, obeys a very common law of recurrence. Like the storm-wind, which in its wilfulness it seems to imitate, it moves in cycles. After a certain number of years it sweeps throughout the length and breadth of a land, and vibrates the chords of men's hearts with a wondrous similarity of power. The epochs of genius have been frequently observed, and are termed in history the ages of certain princes or pioneers of culture. Thus we have the age of Pericles in Greece, the Augustan and the age of Leo X. in Italy, those of Francis I. and Louis Quatorze in France. Sir Philip Sidney was born at Penshurst in Kent on the 20th of November, 1554, in a period crowded with the most brilliant scholars, heroes, and poets this country has ever seen. It was the age of Spenser and Hooker, of Bacon, Raleigh, Buckhurst, Chapman, and Buchanan, of Drayton, Jonson, and Shakspeare. To pass beyond the narrow limits of Britain, it was a time when

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Spain had her Cervantes, Portugal her Camoens, and Italy her Tasso. Not that these illustrious writers formed or even contributed to Sidney's character, for he was among the earliest of them. When he first saw the light Raleigh was a child of two years, Spenser an infant of twelve months, Bacon and Shakspeare were yet unborn. Having acquired the rudiments of knowledge at Shrewsbury School in 1569, he went first to Oxford and then to Cambridge, following not merely the beaten tracks of literature and science, but exploring their innermost recesses with a vehemence as great as it was uncommon. The vastness of his appetite for learning was only surpassed by his powers of assimilation and appropriation. On leaving the university, as was usual with young men of his rank and means, he went abroad. In Paris he was startled by the terrific night of St. Bartholomew, and only escaped destruction through taking refuge in the house of Sir Francis Walsingham, the English ambassador. He stayed, nevertheless, long enough in Paris to make the acquaintance and gain the respect of the learned printers, Robert and Henry Stephens, and to commence a correspondence with Languet, who regarded him with a fatherly tenderness, and gave him the most excellent advice, contributing very considerably to the formation of that bright and honorable character for which he became even at that early age celebrated throughout Europe.

From Paris Sidney passed on to Strasburg and Frankfort; and here he met in person with the venerable jurisconsult, who was then on a secret embassy from the Elector of Saxony. He is thus referred to in the "Arcadia:" —

"The song I sang old Languet had me taught,
Languet, the shepherd best swift Istu knew,
For clerkly reed and hating what is naught,
For faithful heart, clean hands, and mouth as true."

In May, 1575, after a three years' absence, he returned to England, where his varied learning, his gentle and refined manners, and his polished and powerful intellect made him at once the admiration and ornament of the Court of Elizabeth. In

1576 the Queen sent him on an embassy ostensibly to condole with the Emperor Rudolph on the death of his father, Maximilian II., but in reality to feel the pulse of Protestantism in the empire, with regard to a combination of the Protestant States against the Catholic power. A similar mission to John Casimir, Count Palatine, was equally successful. During his stay in Holland he had formed a sincere and enduring friendship with its illustrious Stadtholder, William of Orange. Notwithstanding disparity of rank, the Prince always generously insisted upon treating Sidney as his equal and placing him among the most intimate of his personal friends. Again returning to London, he enjoyed the particular notice and special admiration of the Queen, who exercised towards him a sort of motherly solicitude. He very nearly risked her displeasure over the proposed marriage with the Duke of Anjou, of which he was too patriotic and truly honest to approve, by writing a long letter to the Queen, in which he urged many excellent reasons against the match, and in fact succeeded in setting her mind against it. Becoming involved in a quarrel with the Earl of Oxford, he retired from Court and took up a temporary residence at Wilton, the seat of his brother-in-law, the Earl of Pembroke. Here, to beguile his time, he composed his great work, the "Arcadia." It is a curious allegorical romance, written simply to amuse his sister, the sister on whom Ben Jonson afterwards wrote that most polished of epitaphs: —

"Underneath this marble hearse
Lies the subject of all verse,
Sidney's sister, Pembroke's mother.
Death, ere thou hast slain another
Wise and good and learned as she,
Time shall cast his dart at thee."

The verses stand beneath her portrait at South Kensington, and recall to the spectator the tender sisterly love which years after the young poet-hero's death collected the cherished sheets of manuscript, sent to her one by one as they had been written, and carefully had them printed in his honor. Perhaps, considering the nature of the composition, its greatest praise is that it is not absurd. Neither is it stilted like Harrington's "Oceana," nor long-winded and wordy like Barclay's "Argenis." As Sidney formed his style upon the Italian writers, he is not always able to avoid the blemishes which occasionally mar even the delicious music of the "Orlando." There is a tendency to conceit in phraseology, though it is modified no doubt by the chastening pen of the refined and scholarly woman who undertook the task of its revision.

As he was probably not more than twenty-five at the time of its being handed piecemeal to the Countess of Pembroke, it is scarcely fair to subject it to a very severe criticism. We must remember that he wrote not so much as a practised author, but as a soldierly courtier for amusement. The plot of the "Arcadia" is skilful, but the story is in many parts extremely improbable, while the form of a Spenserean sort of romance in prose cannot but be more or less tedious and wearisome. Still, like the "Faërie Queen," it abounds with brilliant passages. In description of natural beauty Sidney is the equal of any of his contemporaries; in intellectual polish he surpasses many. It is true that that most exquisite of perfumed critics and most fastidious of *dilettanti*, Horace Walpole, speaks of it as a lamentable pedantic pastoral romance; but it has nevertheless received for its wit the praise of John Milton and the deliberate commendation of Sir William Temple.

As for the lesser work, the "Defence of Poesy," it is only the fact of its being overshadowed by the superior fame, or rather magnitude, of the "Arcadia" that prevents its being known as one of the most perfect of literary productions. But apart from his fame as a writer, the chief element of which, after all, probably arises from his brilliant character as a diplomatist and a soldier, he was a man so perfect that it is hard to select a quality which can be spoken of as pre-eminent. He was even in his own day the pattern to which younger men were directed to look. Happening to live at a period when the opinions of the age were just on the point of a radical change, he has a singular felicity in touching the characteristics of the two periods in his own character. Courage, courtesy, grace, humanity, and unsullied honor mark him as the *preux chevalier* of the period ridiculed in the immortal parody of Cervantes, while the love of literature, the cultivated scholarship, the statesmanship, patriotism, and sincere religious belief place him among the foremost spirits of the Reformation. Camden says of him that "he is his own monument who . . . was born into the world to show unto our age a sample of ancient virtues." As a proof of the estimation in which he was held throughout the Continent, he was personally solicited by a candidate for the Crown of Portugal to render assistance, and would have consented had he not been forbidden by the Queen herself.

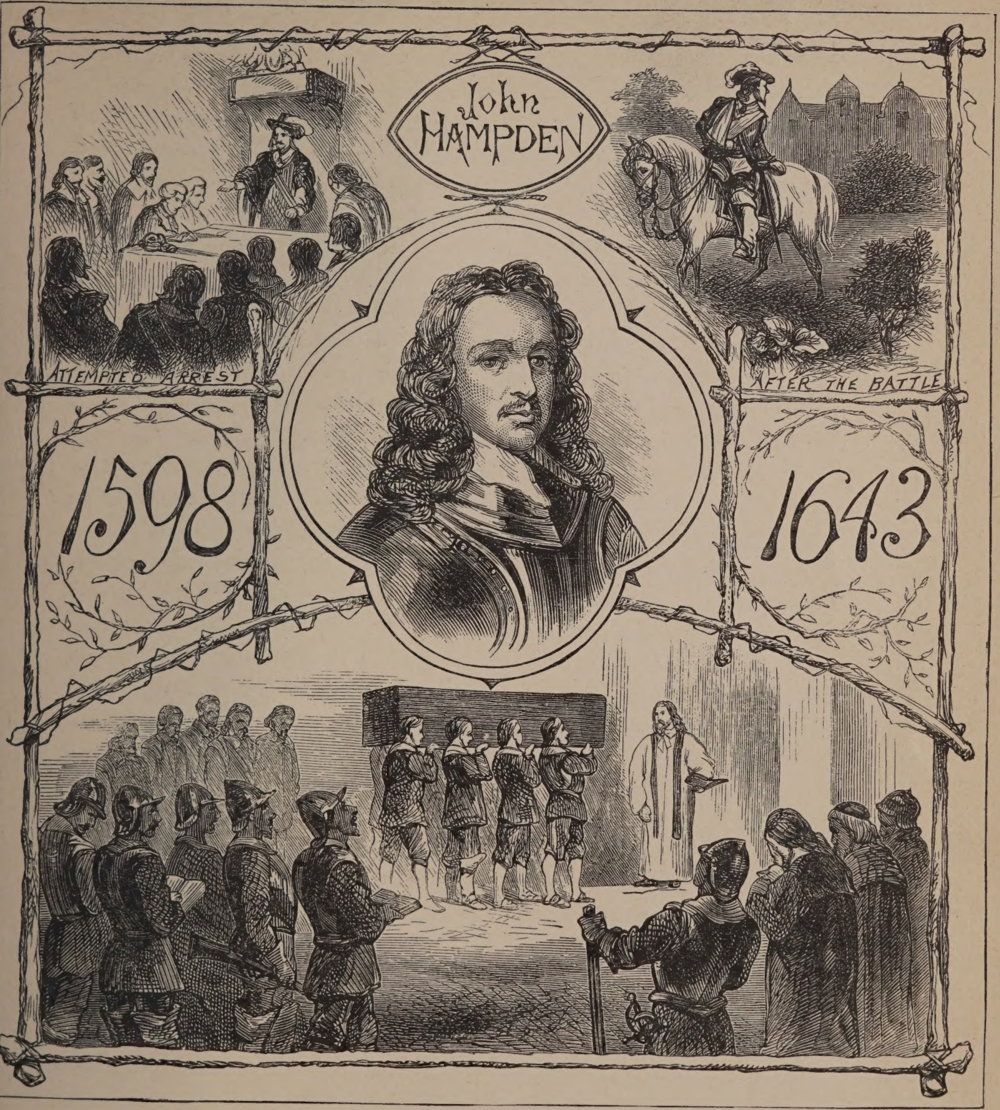
In 1583 he married the daughter of his old friend and patron, Sir Francis Walsingham, and soon afterwards was urged by several foreigners of high rank to become a candidate for the Crown of Poland. He would probably have been elected; but the Queen again interfered. She could not afford to lose the brightest ornament of her Court; and Poland had to struggle on until she perished beneath the selfishness of her latest monarch and the rapacity of her more powerful neighbors.

In 1585 the revolt of the Netherlands against the oppression of Spain and the cruelties of the Duke of Alva brought Sir Philip once more to the front as a soldier. Elizabeth had been urged by the unhappy Hollanders to render them her powerful assistance. In return for her help they made over to her certain of their towns, the principal of which was Flushing. Of this town Sidney was appointed governor, — an appointment which he accepted with the utmost eagerness. Once on the spot, though he had to contend with many grave difficulties, not the least among which were the incompetence and mismanagement of his uncle, the Earl of Leicester, whom the Queen had made Captain-General of the Low Countries, he yet succeeded in rendering important help to the great cause to which he had devoted his energies. His brief career was only long enough to prove how invaluable might have been the services which were lost by his untimely death. At the severely contested fight near Zutphen, while behaving with a coolness and courage that rendered his name a byword for heroic deeds, he was struck with a musket shot in the left thigh, and to his own bitter disappointment utterly disabled. Leaning over his horse's shoulder and riding slowly from the field, he was almost dead with that fearful thirst which seizes the wounded in battle. But even here he was fated to be the victim of self-denial; for, seeing, as he placed the water to his lips, that the precious draught was envied by the longing eyes of a wounded and speechless soldier, he passed it to the poor fellow, and himself rode on to his death-bed. In great agony he lingered on for sixteen weary days, and expired on the 19th of October, 1586, at the early age of thirty-two. In his death he displayed the same great qualities which had ennobled his young but manly life, — courage as became a soldier, calmness as of one whose conscience was without reproach, and resignation as of a devout believer in the Christianity which he had professed and of which his spotless life had been so excellent an example. The sorrow for his death was universal. Not only in England but throughout Europe his loss was mourned as a grievous calamity. Even his enemies admired him and wept over his untimely fate. For months afterwards in England no gentleman appeared at Court or in the city out of mourning. The universities composed elegies in his honor. Even the Scottish King, James, did not think it beneath his royal dignity to write the epitaph of the soldier-poet. And Queen Elizabeth denied the earnest petition of the States of Holland for the honor of his burial, that she might herself render his memory all possible honor in a sumptuous funeral and a monument in old St. Paul's.

JOHN HAMPDEN.

[Born 1594. Died June 24, 1643.]

IN the year 1637 the complaints of the English people against Charles I. were such as for number and justness had been matched in few reigns since the Conquest. Prynne and other martyrs in the cause of civil and religious liberty, who command our esteem and admiration even when the austerity of their Puritanism most repels us, had recently endured mutilation and imprisonment, and, with ears and noses lopped off by the knife of the hangman, now brooded in obscure dungeons over their country's wrongs and their own. Two hateful inquisitions, the Star Chamber and the Court of High Commission, tyrannized, the one over things secular, the other in questions of ecclesiastical import. The Church was servile, the judges were the venal tools of the King, removable from office at the royal pleasure, and well aware that in suits to which the Crown was a party a decision displeasing to the sovereign or his ministers would result in the loss of place and pay. Eight years had elapsed since the last meeting of a Parliament; and the boldest patriot of the assembly dissolved in 1629, the famous Sir John Eliot, had recently expired in the Tower, martyred by an imprisonment inflicted in tyrannous defiance of law. The machinery of despotism was in thorough working order; the property, liberty, and in extreme cases the persons, of Englishmen who dared avow a belief that freedom was more divine than kinghood, had no further security than the forbearance of the sovereign. But Charles had as little mercy as faith; and had he even been disposed to lenity, there were at his elbow two counsellors still more faithless and merciless than himself, — Laud and the implacable Strafford.



JOHN HAMPDEN.

John Hampden, one of the wealthiest and most respected of English commoners, and perhaps the most illustrious of English patriots, was born in 1594. His father, a Buckinghamshire gentleman, was a member of Parliament, sitting as representative for East Looe in 1593. His mother was the second daughter of Sir Henry Cromwell, of Hinchinbroke. At fifteen years of age he was entered as a commoner at Magdalen College, Oxford. Four years afterwards he was admitted to the Inner Temple. In 1619, when in his twenty-sixth year, he married Elizabeth, only daughter of Edmund Symeon, of Pyrton, Oxfordshire, and on the 30th of January in the year following he took his seat in the House of Commons. The borough of Grampound, then a place of some importance, had the honor of first sending him to Parliament. In the first Parliament called by Charles he was returned for Wendover, and in the second he was again returned for the same borough. During the important session which opened in March, 1627, he was already a marked character, and became a member of important committees formed by St. John, Coke, Selden, and Pym. For more than a year he had ranked as the leading opponent of the Court. After the dissolution of the Parliament of 1629, the King and his advisers could obtain money only by resorting to expedients that were so many outrages upon the liberty of the subject and the constitution of the realm. The most shameless of these illegal devices has become historically famous under the name of ship money. In 1588, when the whole naval might of Spain was bearing down upon our coasts, and Drake, Raleigh, Frobisher, and other English sea lions were stoutly preparing themselves for a day of battle, Elizabeth had demanded from the maritime counties a supply of ships and men. Half a century later, at a season when no such danger menaced the State, Charles not only renewed but heightened the demand, extending it to the inland counties, and asking money in lieu of ships, the term "ship money" being a name and very little more, and the whole scheme a despotic expedient for putting a few hundred thousand pounds into an empty exchequer. There were thousands who endured in sullen silence this new drain upon their purses and their patience; there was but one man who had wisdom and courage enough to refuse payment of the sum at which he was assessed. Hampden, one of the most discerning as he was one of the most patriotic of Englishmen, perceived that never could subject combat with more justice or for better reasons the authority of the Crown. By agreeing to the Petition of Right, Charles had solemnly pledged himself not to raise even legal taxes without the consent of Parliament. He now sought, in defiance of his oath, unlawfully to exact from the country a tax that was in itself unlawful. Would the judges, slavish as they were, dare to declare such an abuse of the kingly authority the legal prerogative of a constitutional monarch? If they should, was the spirit of England so tamed that she would look on unresistingly while, at the bidding of a tyrant, men appointed to expound and defend her laws trampled them underfoot?

The result of the memorable trial that ensued is familiar to even the most superficial student of English history. Seven of the twelve judges who tried the suit rated their places at a higher value than their consciences, and gave judgment for the King. The remaining five, although afraid that dismissal would punish their unwonted uprightness, could not avoid declaring that the law was wholly in favor of Hampden. The nominal victory was with the Crown; the real triumph belonged, by the confession of Clarendon, to him whom the great historian terms "the gentleman condemned." The talents, force of character, and ardent though calm attachment to liberty that had distinguished Hampden from the day when, in 1620, he entered upon his public career, had long before marked him out as one of the foremost commoners of England. He now secured by his bold and timely defence of the national liberties the leadership of the party that was banding itself together against the Court, and enjoyed until the day of his death a political supremacy disputed by none but Pym.

The immediate effects of his patriotism were, however, to put his liberty, and even his life, in danger. The year was

1637; the condition of England such as we have endeavored to indicate. Hopeless of any present reform, and well aware of what was likely to befall him at the hands of Strafford and Laud, Hampden determined to seek beyond the Atlantic the freedom that neither for himself nor for others could he gain at home. In the wilderness of Connecticut a few of the persecuted Puritans were already gathered together, slowly shaping out for themselves a settlement in the woods, and finding cold, unremitting toil, the danger of starvation, the neighborhood of stealthy and ferocious beasts of prey and of the yet more cunning and ferocious Indian, more tolerable than the tyranny of kings. These he resolved to join. His cousin, Oliver Cromwell, shared his sentiments and his purpose; and the two were already on board the vessel that was to convey them into their self-sought exile, when an order of council prevented it from sailing and forced the intended emigrants ashore. They landed, the one to die in a few years a glorious death, the other to become the most gigantic figure in the history of the time.

In November, 1640, the Long Parliament met. Hampden at once took the lead in the debates of that stirring time. "The eyes of all men," writes his political adversary, Lord Clarendon, "were fixed upon him as their *patriæ pater*, and the pilot that must steer the vessel through the tempests and rocks which threatened it. . . . His reputation of honesty was universal, and his affections seemed so publicly guided that no corrupt or private ends could bias them. . . . He was indeed a very wise man, and of great parts, and possessed with the most absolute spirit of popularity, and the most absolute faculties to govern the people, of any man I ever knew."

Whether, had he escaped from the skirmish of Chalgrove Field, Hampden would in very deed have come to govern the people of England is problematical; but it is almost certain that a very short prolongation of his life would have seen him general-in-chief of the armies of the Parliament. On the first lighting of the flames of civil war he was content, probably from his lack of military knowledge, with the commission of a simple colonel and permission to raise and equip a regiment of infantry. The vigor and ability he displayed in this subordinate capacity were set off to the best advantage by the faults of his nominal superiors. Already voices were clamoring loudly for his appointment as commander-in-chief in the place of the irresolute Essex, when, on June 18, 1643, Hampden, at the head of a few squadrons of dragoons whom he had hastily got together, cut off the retreat of Prince Rupert, as that impetuous leader was returning laden with plunder from a marauding expedition on which he had ventured forth from Oxford. The skirmish that followed was hard fought, but brief. Two bullets were lodged in the body of Hampden; and as their mortally wounded leader drooped forward in his saddle, the cavalry of the Parliament turned and fled. While the elated Royalists, after sabreing a few of the fugitives, pursued their way to Oxford, Hampden, turning his horse's head from the lost field of Chalgrove, rode slowly to Thame to die.

The story of his last hours has been told by one of the greatest masters of English prose. While the broken prayer, "O Lord, save my country — O Lord, be merciful to —" was on the lips of the suffering Hampden, Death touched them; and there passed away one of the most stainless and unselfish spirits that in any age of the world have been made martyrs to the cause of liberty. Alone among the heroes of his generation, Hampden claims the praise that in all things he labored for his country, and in nothing for himself. Other figures loom forth with a sterner grandeur from amidst the conflicts of the epoch; but on none has history conferred an immortality equally enviable with that of the patriot who first roused Englishmen to a struggle for liberty, but who would have been the last to consent that the altar of freedom when triumphantly erected should be stained with the life-blood of a king.

LORD WILLIAM RUSSELL.

LORD WILLIAM RUSSELL.

[Born 1641. Died 1683.]

IT is too much the fashion to endeavor to trace the descent of every hero from some noble ancestry. Writers would seem to forget that no estate has the monopoly of heroes. The annals of that country prove at a mere cursory glance, and most convincingly, that the liberty and power of England is being built up and consolidated by genius and heroism from every rank. The subject of our present memoir, however, is a hero whose noble descent cannot be controverted, but whose position was, nevertheless, no safeguard against injustice, and whose tragic fate, as in numerous other instances in history, was due to those political excesses to which faction and partisanship can run ere law and justice are wielded with the sceptre.

It is difficult, in these days of constitutional government, — of that more equitable distribution of power which our present and other heroes have won for us, — to conceive how so grave a political murder as the execution of Lord William Russell could have been perpetrated. But the very difficulty which we now have of understanding how so terrible a crime could have been enacted, should show us the vast progress which has been made in political morality; and the crime itself should be a warning to ourselves and to posterity against allowing political passions to rise beyond the bounds of moderation, a wholesome respect for law and order; for if these were to be again trampled down, future historians might probably have to chronicle political crimes as terrible and as reprehensible as that we are recording.

Lord William Russell, third son of the fifth Earl and first Duke of Bedford, the distinguished supporter of constitutional liberty, was born about the year 1641. In 1679, when Charles II. found it necessary to ingratiate himself with the Whigs, Lord Russell was appointed one of the members of the Privy Council. He soon, however, found that his party was not in the King's confidence; and the recall of the Duke of York without their concurrence induced him to resign. Although his temper was mild and moderate, his fear of a Catholic succession induced him to take decisive steps to exclude the Duke of York. In June, 1680, he went publicly to Westminster Hall, and at the Court of King's Bench presented the Duke as a recusant; and in the November following he carried up the exclusion bill to the House of Lords, at the head of two hundred members of Parliament. The King dissolved the Parliament, evidently resolved to govern thenceforward without one; and arbitrary principles were openly avowed by the partisans of the Court. Alarmed at this state of things, many of the Whig leaders favored strong expedients to counteract them; and a plan of insurrection, though imperfectly designed, was formed for a simultaneous rising in England and Scotland. Among these leaders, besides the Dukes of Monmouth and Argyll, were the Lords Russell, Essex, and Howard, Algernon Sidney, and Hampden. They differed in their views, however; and it is now generally admitted that Lord Russell, looking chiefly to the exclusion of the Duke of York, desired only the preservation of the Protestant faith, the most public proof of which is probably to be found in the reversal of his attainder among the very first acts of William and Mary. He was accused of having engaged in the "Rye House Plot," which had for its object the assassination of the King on his return from Newmarket, and was on this pretext committed to the Tower, tried, condemned, and executed in July, 1683, being then in the forty-second year of his age.

The trial took place in the Old Bailey Sessions House; there Lord Russell was brought to the bar. It is true that this court in Charles the Second's time was more picturesque, with its carved oaken fittings, hangings, etc., than now. The whole scene of the trial is admirably represented in the late Sir George Hayter's historical picture, the engraving from which must be familiar to many. The point of time chosen for the painting of an historical work is but of an instant; it is in this case that in which, the clerk of the court having just administered the oath, as is usual on such occasions, the attorneys, advocates, and judges are in a state of bustle and anxious anticipation. The gallery is filled by numerous spectators, whose faces exhibit various degrees of interest in the cause about to be decided. The deeper responsibility of the jury is shown in the prompt actions of some, and in the general though perturbed expression of attention to the business before them. On their elevated tribunal sit the judges; and at a lower table, bestrewn with books and documents, are the advocates and attorneys. Some of the law clerks are busied in writing; the judges, at least, wear the semblance of being calm and considerate; Holt, who was counsel for the prisoner, is attentive to the exceptions which Lord Russell has taken to the co-presence of the witnesses produced against him; the attorney and solicitor generals are conferring; and Serjeant Jeffreys (afterwards so notorious as a judge, and who wears a countenance worthy of a better reputation), in his professional acuteness, and with his forefinger resting on his brief, has risen, apparently to catch some advantage which may militate against the prisoner. Conspicuously seated on a bench beneath the jury-box are Rumsey, formerly a republican officer, and now, as Hume says, a reluctant witness, and Sheppard, who had just been examined, and is attending to the whisper of the former with an air of evident discomfort. The treacherous Lord Howard, upon whose evidence, about to be delivered, must mainly rest the issue of the trial, appears at once surly, apprehensive, and conscience-stricken. In Lord John Russell's biography of his illustrious ancestor he informs us that "Lord Howard began his evidence in so low a tone that one of the jury said, 'We can't hear you, my lord;' upon which his lordship, alluding to the suicide or murder of the Earl of Essex, which had taken place that very morning, replied, 'There is an unhappy accident happened which hath sunk my voice. I was but just now acquainted with the fate of my Lord of Essex.' Having thus shown," adds Lord John, "his sensibility at the death of one of his victims, Lord Howard proceeded to take away the life of another."

At the bar, backed by his personal friends, and conspicuous by his noble presence, stands Lord Russell himself, — calm, dignified, self-collected, equal to either fortune which may await him; and immediately beneath him sits his wife, Rachel, Lady Russell, by whom he was assisted during his trial; and below the bar he is attended by many faithful friends. The presence of Lady Russell brings forcibly to our minds the devoted attachment and the sentiment of patriotism which overcame the natural timidity of her sex, and enabled her to step publicly forward to aid her husband in those anxious hours of trial, when conspired against and assailed by all the villanous means which despotism and its satellites know too well how to array against an enemy. There she sits, attentive and pen in hand, looking anxiously towards her husband, all consciousness of public observation being absorbed in his peril and her own sense of duty. That act has fixed her in the grateful recollection of the country, and as one of England's foremost heroines.

We see the helmeted halberdier who has the custody of Lord Russell; and among his lordship's friends, earnestly attentive to the proceedings, may be noticed the Duke of Somerset, the Marquis of Halifax, Lord Cavendish, Mr. Howard, and the two prelates, Burnet and Tillotson.

Lord Russell met death with the equanimity which through life had always distinguished him. Arrived at the scaffold in Lincoln's Inn Fields, he knelt down and prayed three or four minutes by himself. When that was done he removed his coat and waistcoat, and put on a cap which he had brought in his pocket, fearing his servant might not get up to him, and took off his cravat without the least change of countenance. Just as he was going down to the block some one called out to make a lane that the Duke of Albemarle might see, upon which he looked full that way. Dr. Burnet had advised him not to turn about his head when it was once on the block, and not to give a signal to the executioner; these directions he punctually attended to.

"When he had lain down," says Dr. Burnet, "I once looked at him, and saw no change in his looks; and though he was still lifting up his hands there was no trembling, though in the moment in which I looked the executioner happened to be laying the axe to his neck, in order to take aim; I thought it touched him, but am sure he seemed not to mind it. The executioner, at two strokes, cut off the head."

We must again turn to the now desolate Rachel, Lady Russell. She was to her lord the chosen mistress of his heart, the affectionate companion of his life, the tender and solicitous mother of his children. These qualities were sufficient to stamp her character as amiable; her public conduct mark it as sublime. She attended her husband in prison upon a charge of high treason, and divided her day between the soothing attention which his situation required and the active investigations which his defence demanded. She appeared at the Sessions House, where a nobleman's wife might least be expected, as his secretary, writing with her own hand in a court of justice those notes from which he was to plead when his life was at stake. And after his condemnation she continued to make anxious and unceasing solicitations on every side to obtain his pardon; and yet amidst these restless endeavors to save his life, we have to admire the fortitude which abstained from even hinting to the patriot she was about to see perish on the scaffold that his existence might be prolonged by means degrading to his spirit or inconsistent with his honor.

Mr. Fox, with his accustomed energy of thought and simplicity of taste, writes of the twin patriots who were sacrificed to the tyranny of the Second Charles: "Thus fell Russell and Sidney, — two names that will, it is hoped, be forever dear to every English heart. When their memory shall cease to be an object of veneration, it requires no spirit of prophecy to foretell that English liberty will be fast approaching to its final consummation. Their deportment was such as might be expected from men who knew themselves to be suffering, not for their crimes, but for their virtues. In courage they were equal; but the fortitude of Russell, who was connected with the world by private and domestic ties which Sidney had not, was put to the severer trial; and the story of the last days of this excellent man's life fills the mind with such a mixture of tenderness and admiration that I know not any scene in history that more powerfully excites our sympathy or goes more directly to the heart."

The embarrassment in which every honest lover of liberty is placed when submission to arbitrary power and unprincipled machinations is opposed by the difficulty, perhaps the impossibility, of making lawful resistance, is in Lord Russell's case perfectly removed; for his public conduct in every iota vindicates his fame. Despotism can generally warp Christian texts to its service, which, opportunely proclaimed from the pulpit and the press, would appear to identify royal with theocratical authority, and while aiming at stultifying the rights and privileges of free inquiry and resistance, is intended to exact dishonorable submission by giving the semblance of sacredness to acts of real tyranny. But neither Burnet, nor Tillotson, nor Charles, nor the hope of pardon, could prevail with Lord Russell to lend his sanction to the courtly doctrines of divine right and non-resistance. His personal danger, therefore, arose out of his public integrity and exemplary virtue. He fell in resisting despotism and oppression.

GEORGE WASHINGTON.

[Born 1732. Died 1799.]

IT is curious to note the way in which the same circumstances affect different minds. To one man a great soldier is a hero and a great benefactor; to another he is but a colossal criminal.

GEORGE WASHINGTON.

Thus there may be one view of the liberator of the American colonies simply as a rebel against his king, by which the very patriotism which makes him great becomes the one unpardonable crime of his misguided and mischievous career. But the end to be achieved, its bearing upon the welfare of mankind, must be the final and substantial tests to the value of any political revolution. Whatever may be the influence and function of circumstances over the generality of mankind, it is certain that in some individual cases the current of the world's history is changed, whether for good or evil, by the mental energy of a few individual men. It is, therefore, a fact that George Washington was the controlling spirit of the great revolution known as the American War of Independence. And it must be admitted by all candid and unbiassed judgments that the movement was one which under the circumstances could not honorably or even safely be avoided, and that the War of Independence, therefore, was both necessary and just. In this light the character of Washington receives a lustre, and his motives assume a dignity, to which no mere provincial insurgent could possibly be entitled, however pure his intentions or profound his personal grievances. The grandeur of the event, the vast importance of its issues, the momentous results which success or failure must entail upon the whole population of a mighty continent, have brought down upon the scene a fierce light of scrutiny in which the figure of the calm, silent leader stands nevertheless without blemish. Fearless of any man's censure, his course was direct and unwavering, his integrity unsullied, his justice inflexible. "He was," says Jefferson, "in every sense of the word, a wise, a good, and a great man."

George Washington was born on the 22d of February, 1732, in Westmoreland County, Virginia. His ancestors had been settled as planters in that remote district for three generations. About the year 1657 two brothers, John and Lawrence, emigrated from Lancashire and established themselves on the Potomac River. John, the elder, had two sons, Lawrence and John. Lawrence had three children, John, Augustine, and Mildred. Augustine was the father of George. He was twice married, having four children by his first marriage and six by his second. George was the eldest of the second family. Not long after his birth his father removed from Westmoreland to a spot on the east side of the Rappahannock, in Stafford County, opposite Fredericksburg. When George was ten years old his father died. His mother lived long enough to see him President of the New Republic. On the father's death, in 1743, his extensive property was divided by will among his children, Lawrence, the eldest son, obtaining a plantation on the Potomac, since become memorable and almost sacred as Mount Vernon. To George was bequeathed the estate in Stafford County, on which the family were then residing. Eleven years afterward Lawrence died, leaving a daughter, who never enjoyed good health and who died at the age of eighteen. In this way the future liberator became possessor of the world-renowned mansion which is so inseparably connected with his name.

In the district of country where he spent the first years of his life there were but few advantages for education outside the family circle. In some instances, where the plantations were sufficiently near each other, several households contributed to provide a school. But planters who lived in the remoter districts could only obtain the advantages of education for their children by means of private tutors who resided in the household. In the case of Washington it appears that even this means of tuition was not found. But there is ample reason to believe that his parents fully and faithfully executed the trust committed to them, and by enlightened and diligent instruction and discipline developed the admirable qualities which nature had bestowed upon the quiet and thoughtful youth.

He was born with a physique of the noblest kind. Tall in stature and massive in build, he was admirably fitted by nature for command, his moral qualities and mental gifts completing the grandeur of his character. To these starting-points of advantage were added habits which could only have been the result of a most careful education. From childhood he was remarkable for neatness, method, caution, and self-control, —

qualities which constitutionally could scarcely be accounted for. That early life on the banks of the Rappahannock was the making of the future general and statesman. His English ancestors belonged to the best-bred class of the mother country; and the characteristics of high culture were transmitted to the latest born, not weakened, but rather heightened, by the circumstances of the patriarchal life of the family. The extensive domains, the independence of life and manners incident to a community of planters, the hospitality practised among them, and the countless interesting and romantic features and details of wilderness scenery and experience, contributed to enlarge the elements of an unusual and noble character.

At fourteen years of age we find him at school; and while there it was proposed to obtain for him a commission as a midshipman in the Royal Navy. Just, however, as this project was about to be accomplished, it was defeated by the earnest interposition of his mother. It is a curious reflection to think what would have been the result of certain changes in the destiny of some men, — if, for instance, Oliver Cromwell had been permitted to emigrate, if Hampden had not been killed at Chalgrove, if Washington had entered the navy, or if a thousand other imaginary alternatives of history had occurred. The best answer to all such idle speculation is the fact that they did not occur. Destiny rules otherwise.

After the project of making a sailor of George had been abandoned, it was decided to educate him for the profession of a land surveyor. Thus it was that he became a proficient in geometry and trigonometry, and at sixteen left school to enter upon his profession, which at that time, in a comparatively new colony, was regarded as both lucrative and important. His manuscripts and drawings executed while studying for a surveyor have been preserved, and show that he was well qualified for his business. He never did anything for show. Whatever he professed he knew. His school exercises were characterized by the same neatness, regularity, and order which marked all the productions and actions of his future life. In March, 1748, he entered upon the important office of exploring and surveying the extensive estates of Lord Fairfax, his kinsman by marriage, for the purpose of dividing it into lots to suit the requirements of continually incoming settlers. A journal which he kept of his adventures on this expedition is interesting, as showing the kind of training which was preparing him for the high destiny to which he was afterwards called. It was a life of privation and peril, but at the same time it was full of excitement. Naturally powerful of frame, this adventurous life favored the development of activity and strength. Three years' experience gave him a firmness of muscle and vigor of physical energy which few men ever attain at any age. With such a frame and after such experience, encountered voluntarily, there was no danger either of his being seduced by luxury or deterred by danger from what he considered the path of duty. With the pleasures of society and the luxury of indolence within his reach, he sought for a career weighted with hardship and privation. He believed himself created to play a more manly part in life. As to society, his private journal and even his letters show that he was by no means insensible to the amenities of fashionable life or the charms of feminine conversation. But to such a disposition as his a life of ease and nothing else would have been torture. Peril became his pleasure, and labor his indulgence. Hence it followed that he gained respect and admiration from all who knew him; and herein we see the force of his character.

His experience as a surveyor was, moreover, of great advantage to him as giving him a minute acquaintance with the condition and character of the original settlers, — especially of the backwoodsmen who were among the earliest European occupants of Washington's own section. These remarkable people constituted the pioneer circle of the expanding colonies, and at this time formed a large proportion of the whole Southern colonial population. The strip of emigrant occupancy stretching along the coast of the Atlantic consisted of two distinct parts, — one the mercantile and seafaring class, occupying the narrow sea-board; the other the exploring backwoodsmen, invaders of the primeval forest. Among the latter Washington spent most of the three years of his surveyor's life. He learned intimately their habits and manners; and when afterwards he was called upon to enroll an army drafted largely upon this hardy and independent race, he was the only leader thoroughly capable of commanding them. Among the rough and sturdy foresters he inured himself to the utmost simplicity of life. He won their sympathy by mixing in their contests of agility and strength, and compelled their admiration by his own surpassing skill, strength, and intrepidity. In his surveying excursions he also acquired that mastery in horsemanship which was the envy of his brother officers and companions. Afterwards, as a military leader, every one declared that he possessed an ease, dignity, and control of the animal which they never saw elsewhere. Among other anecdotes told of his equestrian accomplishments, it is related that when a youth there was on his mother's estate a young horse so wild, fierce, and powerful that no one could be found able or willing to break him. Several strong and experienced horsemen had been utterly baffled. Immediately, on hearing of the circumstance, George resolved on trying his hand with the colt. The experiment took place before a crowd of spectators. By the usual stratagems he succeeded in coaxing the animal near enough for him to spring upon his back. Instantly the horse leaped into the air, and dashed round the field, flinging, rearing, and kicking with the greatest violence. But George kept his seat firmly and steadily. Away flew the enraged and frantic creature wildly, from point to point, — plunging, rearing, and foaming. It was all in vain; George could not be dislodged. At last the noble animal, whose spirit was as indomitable as that of his rider, gave one desperate and mighty leap and fell dead to the earth.

Washington's experience in the backwoods also brought him much into contact with the Indians. All along the colonial frontier no subject contributed so much to the every-day thoughts and conversation of the settlers as their relations to the savage tribes which hovered about their clearings. Washington knew the character of the wily and implacable red-skin, and the best manner of dealing with him. His training for the coming destiny was marvellous. Another and by no means unimportant quality as a soldier which this training gave him was the skill in estimating rapidly the features of an extensive country. He possessed at the outset of his career an accomplishment which is usually one of the last attainments of a general, and the result of long experience in the conduct and arrangement of large bodies of men.

In his nineteenth year he was appointed a major of the militia then being trained, and adjutant-general in one of the districts of Virginia, and thus entered upon the second period of his probation. At this time the frontier was threatened with Indian depredations and French encroachments. France had just unfolded her ambitious design of connecting Canada with Louisiana, and in this way enclosing within a French cordon the British colonies in North America. The army was directed to establish a line of posts from the lakes to the Ohio. This district the English maintained to lie within the boundaries of Virginia. Dinwiddie, the lieutenant-governor of the province, alarmed by a movement which involved such important interests, thought it proper officially to warn the French to desist from pressing their scheme, which he deemed a violation of existing treaties. The great difficulty was to select a proper agent to carry this perilous message. He must pass through an unexplored wilderness, tenanted by tribes of Indians, most of whom were hostile to the British settlers. In October, 1753, Washington, who had volunteered for the appointment, received his commission and commenced his journey. The peril and fatigue of this enterprise had not been overrated. But the judgment and perseverance displayed by Washington raised him still more in public opinion, and gave a reliable earnest of his future services. The next year he fought a superior force of the enemy, and brought off his own men by an honorable capitulation. Owing to an order from the War Office, which he rightly thought degrading to provincial officers, he resigned his commission; and as he had just succeeded to the estate at Mount Vernon, he retired thither, resolved to devote his life to agriculture and the study of philosophy. This resolution lasted about two months. Meantime he had been elected a member of the House of Burgesses, and found time for public as well as private duties. His chief rural amusement was hunting. He exported the produce of his farms to London, Liverpool, and Bristol, and imported everything required either in his house or on his estate. In the House of Burgesses, where his attendance was punctual, he seldom spoke; but as he always made himself master of the subject under discussion, his opinion was greatly valued and often sought by his colleagues.

In 1755 Washington joined as a volunteer the army of General Braddock, whose purpose it was to expel the French garrison from Fort du Quesne, now Pittsburg. An overwhelming defeat of the British troops, followed by a rapid retreat from the field of battle, ended the campaign disastrously. Braddock was killed. Washington had two horses shot under him while carrying the general's orders through the thickest of the fight. He was repeatedly fired at by the enemy's Indian marksmen, who afterwards declared that the brave Long-knife bore a charmed life, and could not be harmed by their bullets. Providence seemed to have preserved him in a most signal manner in this instance.

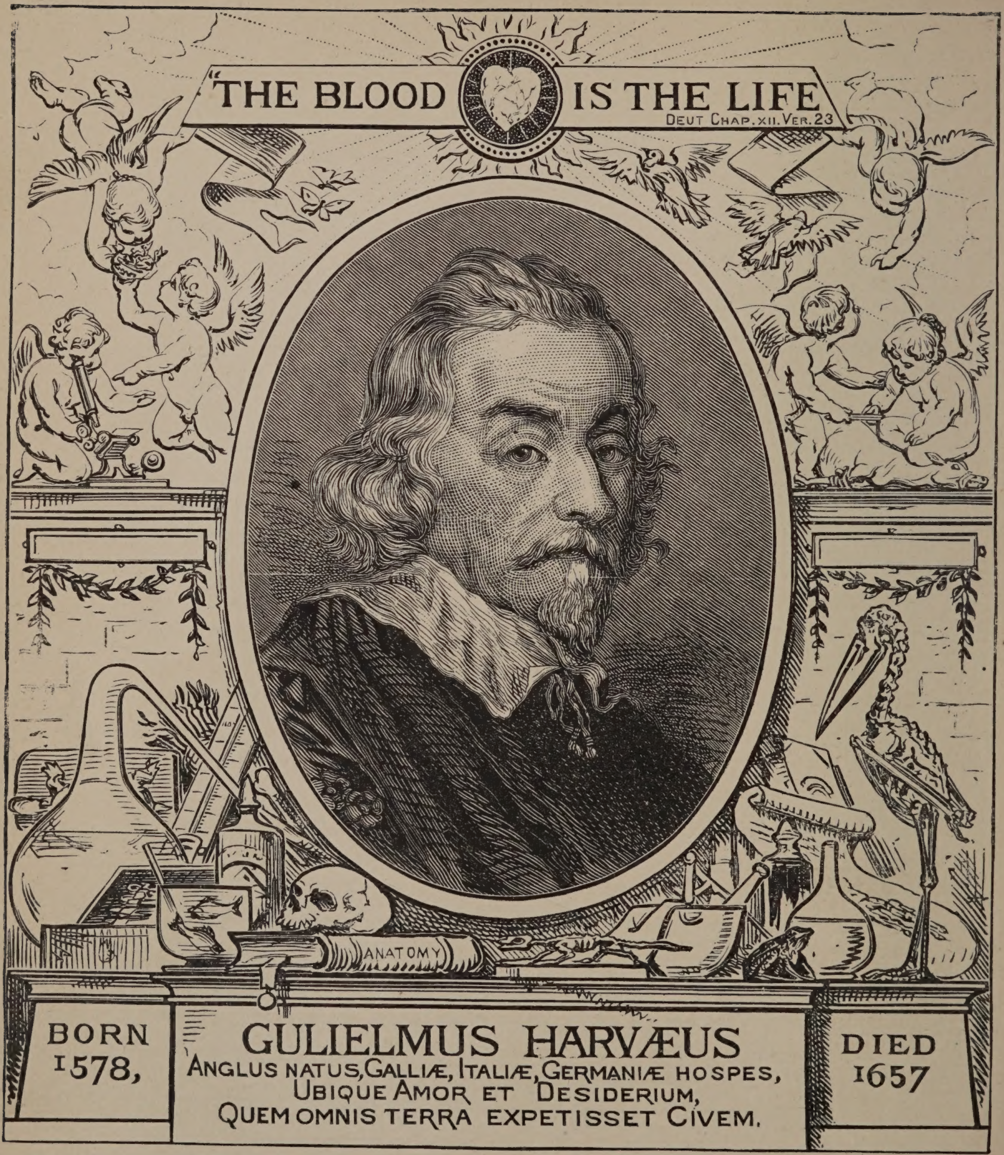
Such, in brief, was the moral and physical training of Washington for the part that he was destined to play in the great coming struggle between Great Britain and her colonies. In 1759 he married Mrs. Custis. His wife was a young widow lady with two little children and broad estates, which added to his own extensive property made him one of the most important land-owners in the province. With this independence of position, and his vast and varied experience, he ripened for the great task of first liberating and then governing a nation.

In his forty-third year, just when the physical vigor is undiminished and the intellect fully matured, he was elected commander-in-chief of all the colonial forces, and immediately repaired to the scene of active hostilities before Boston.

Seven years he maintained with heroic fortitude, under the severest trials that man could encounter, the cause for which he had unsheathed his sword at the call of his country. We know not whether to admire him most in the hour of defeat or in the moment of victory; for in every important crisis the demand upon his greatest qualities as a leader was always fully answered. With each new misfortune he rose to a still higher sense of the great responsibility he had assumed. When he had troops, he fought. When unable to keep the field, he took an advantageous and threatening defensive. When the hopes of the people were at their lowest ebb, and his army had dwindled to a few ragged battalions, he rolled the tide of war back again towards fortune by the most brilliant and decisive series of combats and manœuvres that the whole history of the war has recorded. So high was Washington's bearing, so admirable his control of the most diverse elements, so serenely did he look disaster, obloquy, and suffering in the face, that we can hardly think of him except as the predestined savior of his country. The time produced no other man capable of confronting each new emergency with the same sublime constancy to the great end and aim of the Revolution. The Congress was at one time ready to declare him dictator. The army, grown desperate in its deep distress and deeper disgust with the half measures of Congress, wished to overturn the existing civil control under the lead of its idolized chief. But in every dark hour Washington's star shone out bright and unsullied by any taint of personal ambition, nor could any sense of personal wrong turn him a hair's breadth from the path of duty. His was a great, a magnanimous soul. When the long conflict was over he laid down the sword that had never been sheathed in dishonor. His old companions in arms wept like children when he bade them farewell. Compared with this, what was the tribute of senates or the applause of the multitude? Indeed it may be said of Washington that there is scarcely another great figure in history whose character and services have been estimated with such unanimous, such high, approbation as his. His mottoes were, "Deeds, not words," and "For God and my country;" and his adherence to these has merited the everlasting verdict of history, "First in war, first in peace, and first in the hearts of his countrymen."

V.

SCIENCE AND INVENTION.


"THE BLOOD IS THE LIFE
DEUT CHAP. XII. VER. 23
ANATOMY
BORN 1578,
GULIELMUS HARVÆUS
ANGLUS NATUS, GALLIÆ, ITALIÆ, GERMANIÆ HOSPES,
UBIQUE AMOR ET DESIDERIUM,
QUEM OMNIS TERRA EXPETISSET CIVEM.
DIED 1657

DR. WILLIAM HARVEY.

DR. WILLIAM HARVEY.

[Born 1578. Died 1657.]

THE life of William Harvey is full of interest to every student of anatomy, physiology, and medicine. It closely concerns us all; for before his time little was known of the human frame, and his discoveries have a practical bearing on the treatment of even the simplest complaint. Born at Folkestone in 1578, Harvey had the inestimable advantage of good scholastic training. From the grammar-school at Canterbury he went to Caius College, Cambridge, in 1593, and, after studying logic and natural philosophy there six years, he subsequently resided in Padua, then a celebrated school of medicine, and attended lectures on anatomy, pharmacy, and surgery, delivered respectively by Fabricius al Aquapendente, Minadons, and Casserius. The common language of learned men at that time was Latin, in which Harvey himself composed his works. He wrote it, indeed, correctly and with elegance. In Padua he was admitted to the degree of Doctor of Medicine, and at the age of twenty-four he returned to England. It was in August, 1615, that he was chosen by the College of Physicians to deliver his Lumleian lectures on anatomy and surgery; and he is supposed to have taken the earliest opportunity of bringing forward his views on the circulation of the blood, which he afterwards developed more fully and published in 1628. The fact is that while studying at Padua a new world of observation had opened itself to Harvey's inquiring mind. His master, Fabricius, had called his attention to certain curious valves inside the veins, made by the folds of their lining. Why did they lie open when the blood was flowing towards the heart, and close up and bar the way the moment it was not flowing in that direction? Fabricius said it was only to prevent the blood rushing too fast into the branches of the veins; but Harvey was not satisfied with this reason. By experiments which he made he found that the arteries carried blood from the heart, and the veins brought it back again; hence the throbbing of the arteries charged with blood pumped fresh out of the heart and sent through the body.

But this was far from being the whole of Harvey's discovery of the circulation of the blood. It was but half of it. After the blood has gone its first round, — the blood in the lower artery being returned to the heart by the lower vein, and the blood in the upper artery by the upper vein, — it starts upon a new circuit. Descending through some valves from the upper chamber, or auricle, of the heart to the lower, it takes its flow through the lungs and comes back by the pulmonary or lung-vein into the upper heart-chamber, from which the entire round begins afresh. The first journey is called the general circulation, and the second the pulmonary circulation, in which the change that the blood undergoes is of the most important kind. The blood which is carried becomes exposed to the action of the air by means of the capillary vessels; it loses carbonic-acid gas, which is poisonous, and absorbs oxygen, which is life-giving. This fact, it is true, was not known to Harvey; but he prepared the way for its discovery by the substantial proofs he exhibited of the double circulation.

Harvey, however, was not hasty in arriving at his conclusions. It was nineteen years before he traced the blood through all the channels of the body, and he felt quite certain that he had grasped truth without admixture of error. Yet he experienced the fate of all who are in advance of their fellows. The older physicians would not believe that he was in possession of truths which they had never taught or learnt; and Harvey told a friend he had lost many patients through his new discovery. But the unfortunate sovereign, Charles I., whose physician Harvey was, cannot be numbered among those prejudiced persons who opposed him. The King, on the contrary, allowed him many opportunities of making physiological experiments by the help of deer in the royal parks, took great interest in his scientific researches, and made him, for a time, head of Merton College, Oxford. But he was of a retiring disposition, and so averse to controversy that he could hardly be persuaded to publish his later investigations when he had become aware of the disputes and ill-will occasioned by his discovery of the circulation of the blood.

With the exception of Gilbert's discovery of terrestrial magnetism at the close of Elizabeth's reign, Harvey's was the only one of any real value proceeding from English research before the Restoration. But he did not fail to make his mark during his lifetime; and having spoken of him in connection with Merton College, Oxford, we may add that a knot of scientific men used to meet in that university about the year 1648, among whom the discoveries of Harvey used to form frequently the subject of conversation. They were Dr. Wallis, Dr. Wilkins the warden of Wadham, Dr. Ward the eminent mathematician, and the first of English economists Sir William Petty. "Our business," Wallis says, "was (precluding matters of theology and State affairs) to discourse and consider of philosophical inquiries and such as related thereunto, as Physick, Anatomy, Geometry, Astronomy, Navigation, Statics, Magneticks, Chymicks, Mechanicks, and Natural Experiments; with the state of these studies as then cultivated at home and abroad. We then discoursed of the circulation of the blood, the valves in the *venæ lacteæ*, the lymphatic vessels, the Copernican hypothesis, the nature of comets and new stars, the satellites of Jupiter, the oval shape of Saturn, the spots on the sun and its turning on its own axis, the inequalities and selenography of the moon, the several phases of Venus and Mercury, the improvement of telescopes, the grinding of glasses for that purpose, the weight of air, the possibility or impossibility of vacuities and nature's abhorrence thereof, the Torricellian experiment in quicksilver, the descent of heavy bodies and the degree of acceleration therein, and divers other things of like nature."

Harvey's inquiries into the subject of incubation, carried on, as they were, by means of a long and patient series of experiments, were of considerable value, though not to be compared in importance with those relating to the heart and lungs. It was this last which gave him his name among posterity, and which, by its novelty and boldness, aroused so lively an opposition among his contemporaries. It is not surprising that he should speak of the things he had put forward as "so new and unheard of that I not only fear evil to myself from the ill-will of some, but I am afraid of having all men for my enemies, so much are persons influenced and led by habit, by doctrine once imbibed and rooted in them deeply like a second nature, and by a reverential regard for antiquity." Hence he was violently opposed by Primerosius, Parisanus, Pliolanus, and others. The last of these was the only adversary to whom he replied. Not a single physician over forty years of age admitted his discovery; but Plempius, a Professor of Louvain, one of his early opponents, declared himself a convert, and, through his example, many more laid down their arms. Dr. George Ent, a Fellow of the College of Physicians, supported him, and replied to Parisanus.

It was in 1623 that Harvey was appointed physician extraordinary to James I.; and when he afterwards became physician to his son, Charles I., he was in the habit of exhibiting to his Majesty and to the most observant persons of his Court the motions of the heart and other phenomena on which his teaching was founded. During the civil war he moved about with the King from place to place; and it was while staying for a short time in Oxford that the King made him master of Merton, and, by an admission *ad eundem*, he received the degree of Doctor of Medicine. The mastership, however, was a very transient honor. In a few months the Puritan party regained the ascendancy and replaced Brent, whom the King had displaced. Soon after he suffered still more from the violent partisanship of the time. His house was burned and plundered, several unpublished works of his being unfortunately destroyed. This must have been a severe trial, and similar in its character to a distressing loss experienced by Sir Isaac Newton at a later period. The latter years of his life were spent at his country

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house at Lambeth, or with his brother, not far from Richmond. In 1654 he was elected President of the College of Physicians, but declined the office in consequence of his age and infirmities. He presented, however, his library to the College, and also during his lifetime a farm which he had inherited from his father. He died at the venerable age of eighty in 1657; and a monument to his memory may be seen at Hampstead, in Essex, where he was buried. In 1766 the College of Physicians published his works in Latin, in a quarto volume; and two manuscript works of his are preserved in the library of the British Museum. An admirable life of him has recently been published.

LINNÆUS.

[Born 1707. Died 1778.]

KARL LINNE, or, as he is usually called, Linnæus, was born on the 23d of May, 1707, at Rashalt, in Sweden. His father belonged to a race of peasants, but, having by his personal efforts raised himself to the position of pastor of the village or hamlet in which he lived, he followed an old Swedish custom common in such cases of adopting a surname, and called himself Nils Linnë. Nils is the familiar Swedish for Nicholas, and Linnë the name of the linden-tree. According to immemorial usage among the peasantry, the son of Nils would be Nilsson, and if he were Olaf, he would be called Olaf Nilsson, and so on. But with Nils the clergyman it was a different matter. A favorite linden-tree in the village furnished the required surname, and henceforth himself and his children became Lindens. For a similar reason the good pastor's brother-in-law became Tiliander, or Lindenman. The choice was not made at random. Both Nicholas and his wife's brother were men of taste and culture, and both were tolerably proficient botanists. It so happened that the village manse was situated on the banks of a lovely lake in the midst of picturesque scenery. The clergyman cultivated fields and gardens, and probably found equal profit and pleasure in the occupation.

Thus it was that the children grew up in the midst of everything that could awaken in them the love of nature or allure them towards its study. Such surroundings naturally fostered young Karl's fondness for plants or flowers, and, by displacing all other boyish tastes and ordinary studies, entirely upset the cherished parental design of making him a clergyman. The result, however, while it certainly disappointed, did not altogether displease, the elder Linnë. He could not ignore his own tastes, nor the many fascinations to which the very homestead rendered the boy susceptible. Wisely judging remonstrance useless, he resolved to give him a fair opportunity for the cultivation of his special gifts. A corner of the spacious garden was marked off and assigned to Karl's separate use. He was to do with it as he pleased. And in a very short time he so crowded it with specimens gathered from wood and field that the indulgent gardener employed by his father could not possibly stand the invasion which threatened the rest of the property. Weeds of no possible economic, or so far as any one knew of any scientific, value were promoted to a dignity and permitted a space which daily encroached upon the paternal allotment. The unfamiliar richness of the soil raised some of the merest vagabonds of the forest into a condition of luxuriant overgrowth. Useless or intrusive as they seemed to be, nevertheless they were material for the youthful botanist. He was the while making rapid progress in the acquirement of that practical knowledge which was essential as the groundwork of his future studies. He attempted a systematic arrangement; but, either owing to his own desultory mode of working or the defective way in which many species had hitherto been noticed, the attempt failed. Many persons who have only heard of Linnæus as the father of botany are still under the impression that no systematic knowledge of the subject existed before his time; but this is a great mistake. Perhaps no study is of greater antiquity, or has attracted more devoted followers in all ages of the world's history. We all know that natural history was one of the important realms of science which made up the learning of Solomon. He knew every plant and tree, from the hyssop of the garden wall to the venerable cedar which crowned the summits of Lebanon. Among the Greeks, Romans, and Arabians botany was ever a favorite pursuit. The names of Aristotle, Dioscorides, Pliny, Al Razi, and Avicenna attest the importance of the study in ancient and mediæval times. Yet it must be admitted that no very great progress was made by any of the older naturalists. It is calculated that all the species ever discovered or described by all the Greek, Roman, or Arabian botanists put together did not exceed fourteen hundred. The first herbarium on a methodical plan was published in 1530 by Otho Brunfels, of Mentz. The first botanic garden in Europe was opened in 1536 on the banks of the Po in Italy. The work of Brunfels was the earliest modern work which was founded mainly on observation. Herbals, it is true, compiled from Latin or Arabic sources, had existed in mediæval times. One of the first printed books was a treatise on domestic medicines, thus early put to the press because of its popularity; but nothing of a really scientific character had appeared since the time of Pliny. In 1551 came out the Herbal of Jerome Bock, in which natural resemblances were made the basis of classification. Conrad Gessner, of Zürich, introduced the important distinctions known as "genera" in a great work written as early as 1565, but not published for nearly two hundred years. Cæsalpinus, of Arezzo, printed at Florence in 1583 a mass of suggestions and observations in botany which remained nearly a century before they were noticed as of scientific value. In fact, one writer after another adopted this or that method of his predecessors, and fitted it to his own peculiar theory. Charles de l'Ecluse, or Clusius, first taught that conciseness of description which has since threatened to become almost algebraical in its strictness and severity. Clusius, by the way, tells us some rather curious facts, which are still not generally known. Among the rest he asserts that potatoes were well known and in common use in Italy in the sixteenth century.

The popular opinion is that Sir Walter Raleigh brought them with tobacco from Virginia, and that the English were the first Europeans to appreciate their value. Just previous to Linnë's own time had appeared the great works of Ray, Tournefort, and Vaillant. Jussieu was his contemporary; so was Boerhaave; so was Reaumur. It will be seen, then, that botany was not without scientific advocates. But it was not very early in life Linnë's good fortune to meet with any of the latest writers. His boyish guides were one or two old folios, of whose deficiencies he bitterly complained. Had he met earlier with Tournefort's "Elements of Botany," his own acquirements would have been more easily obtained, but they would probably never have been so solid and so profound. Tournefort's book is a perfect treasury of botanical lore. In fact, it has been said that with its aid alone the student might become a botanist, so correctly is the work illustrated, and so fully are its different headings dealt with. Yet, in view of a perfectly scientific classification, not only Tournefort, but every other writer, except perhaps Jussieu, is essentially deficient. To be at once scientific and not to some extent artificial is, without almost unbounded knowledge, practically impossible. It is therefore a question more or less of expediency; and on this ground are the respective merits of the various botanical systems fairly comparable.

It was when studying as a boy of eleven at the school of Wexio that Karl Linnë's unfitness for the Church was finally admitted. The schoolmaster pronounced him a dunce, and recommended his being apprenticed to some handicraft, whereupon the simple-minded father actually contemplated making him a shoemaker. A Dr. Rothmann, who was professor of medicine to the Wexio College, had noticed the peculiar genius of the misplaced student, and offered to take him into his own house. Here he first met with "Tournefort's Elements," which increased his ardor while it enlarged his views. But even yet he could not arrange his collections. Three years a student at Wexio, he was no nearer a learned profession at the end of his term than he had been at the commencement. And now began a period of hardship such as only occasionally falls to the lot of youths of his position in life. Following the advice of Dr. Rothmann, he visited Upsal, with the view of pursuing his studies in the university; but he soon found that his slender means — he had taken with him £8 — were wofully insufficient even for the most modest computation of student life in a university city. As for employment in tuition or otherwise, every day rendered that less and less possible, as his wardrobe grew daily less presentable. Though he gained a scholarship, it was too small to be of essential service, and he felt most keenly the necessity to which he was reduced of accepting from his fellow-students a cast-off garment or a proffered dinner. Even the old shoes they gave him had to be patched by his own hands with pieces of pasteboard. Private pupils to this dilapidated stranger were out of all question, and he sank lower and lower in poverty. His father could not support him, and he knew of no one to whom he dared apply even for food or shelter. Imagine the sufferings of the susceptible and ardent youth during those weary days, which good old Dr. Rothmann had pictured as likely to be full of happy student life and gilded with successful tutorships. All this dreadful time, however, he still hoped for a bright future; for he resolved to become great in his seemingly most unprofitable subject, and his strong religious principles kept him from giving up the struggle. In the autumn of 1729 Linnë was one day very intently examining certain plants in the garden of the academy when he was accosted by a venerable clergyman, who asked him a variety of questions about botany, if he knew anything of it, and how long he had studied the science. He replied to every question with such intelligence that the questioner became deeply interested. Linnë told him that he possessed a cabinet containing above six hundred indigenous plants. The clergyman, now quite delighted, invited him to his house, and on learning his condition supplied him with every necessary, and asked his assistance on a work on which he was engaged. Thus began a lasting friendship between Linnë and the celebrated Dr. Olaus Celsius. Other advantages soon followed; with an improved outfit prosperity at once dawned. The son of the professor of botany in the university, Dr. Rudbeck, and other young men, became his pupils. Fresh books became accessible, and new ideas crowded upon him. From a treatise of Vaillant on the structure of flowers he first caught the idea of the sexes of plants, on which he afterwards founded his own botanical system. Shortly afterwards, attracting the notice of Rudbeck, he was appointed deputy lecturer and demonstrator of practical botany in the Public Garden. A pleasant manner and an animated style of lecturing soon made him a great favorite with the students, but his rapid success was the cause of envy in others. He possessed those two invaluable qualifications of success, great powers of mind united with great physical endurance. Hence, when the Arctic Survey was suggested as a means of improving the natural history of Sweden, the Upsal Royal Academy of Sciences selected Linnë, or as he began to be called, according to Swedish learned practice, Linnæus, as a proper person to be intrusted with the undertaking. Thus came about his journey to Lapland, his own account of which, from its intensely personal character and its fulness of incident, may claim a parallel with the celebrated "Personal Narrative of Alexander von Humboldt." Both accounts are interesting in the extreme, not merely from the eminence of the writers, but from their combination of personal adventure with scientific investigation. Among other valuable results of this extraordinary journey, undertaken on a vote of less than £8 sterling, and embracing a route of no fewer than three thousand eight hundred English miles, was a knowledge of assaying metals, a subject quite new to the students of Upsal University. In the following year he gave private lectures upon it.

On his return from Lapland he had been elected a member of the Academy; but, not having taken his degree, he was legally disqualified from lecturing, and for once in his life Linnæus, though usually a most amiable man, was in great danger of expulsion from the university, through his resentment towards a rival tutor who envied his success, and took advantage of the statutes to prohibit his taking pupils. Linnæus in consequence was again thrown upon a prospect of poverty, for these pupils were his sole means of support. Learning his circumstances, several of them delicately proposed an excursion to the mines of Fahlun, in Dalecarlia. This was in 1733, when he was in his twenty-sixth year. After another journey with the sons of the governor of the province he returned to Fahlun and spent some time lecturing on mineralogy. At this time he made the acquaintance of a physician, and, what was of more consequence to himself, fell deeply in love with the physician's daughter. But he was still without a degree; and as this was a *sine quâ non* towards practising as a physician, the profession to which he now turned his attention, he had no prospect of being able to marry. He was, however, accepted by the lady, whose rank and beauty had, he at first thought, placed her utterly beyond his reach. Her father recommended him to abandon botany as a useless and unprofitable pursuit, and keep to medicine, or he would never be able to maintain a wife. But he could not afford to take his degree at Upsal; and although his betrothed sent him a hundred dollars saved out of her own private pocket-money, he was obliged to seek a cheaper university.

The following year (1735) he graduated as M.D. at Harderwyck, in Holland, and began a tour through the principal cities, making many new friends and writing several fresh treatises. Among the friendships he formed at Leyden were those of Gronovius and Boerhaave. By the advice and help of the former he published his "Systema Naturæ," and by the recommendation of the latter was introduced to Mr. Cliffort, the burgomaster of Amsterdam, in whose service, as keeper of the museums and gardens, he found the most congenial occupation he had ever known. At Cliffort's request Boerhaave gave his young protégé a letter of introduction to Sir Hans Sloane, in London, and accordingly Linnæus visited the famous old physician and collector. His reception was by no means cordial; but before he left England he had gained the friendship of those who at first treated him with coldness and suspicion. By and by came a journey to Paris, with an introductory letter to Antoine de Jussieu. The meeting was rather curious. On his arrival in Paris he proceeded at once to the Jardin des Plantes, where Bernard de Jussieu, a skilful botanist, was describing some exotics. Fortunately for Linnæus, who knew no French, the description was in Latin. One of the plants seemed rather to puzzle the lecturer. Linnæus, who to this moment had looked on in silence, noticing the embarrassment of the professor, exclaimed also in Latin, "It looks like an American plant." Jussieu, surprised, turned quickly round and said, "You are Linnæus," and in presence of all the students gave him a cordial welcome.

In French circles, as in England, his claims were at first met with sneers, and he was spoken of as "a young enthusiast whose only merit consisted in having reduced botany to a state of anarchy." But he was respected before he left. On his return to Sweden he hastened to Fahlun, and thence to Stockholm; but the homage he had received abroad had somewhat turned his head. He thought himself slighted, and had it not been for the physician's daughter at Fahlun, he would have quitted his native land. A mere trifle helped to keep him at home. During the prevalence of an influenza he visited the lady of an Aulic councillor, and prescribed for her a portable and facile remedy. This lady being one day in the presence of the Queen, Ulrica Eleonora, the latter observed her quietly putting something into her mouth. Her Majesty's inquiries led to information about the young doctor, and he was sent for to prescribe for a cough under which she herself was suffering. He succeeded in removing the cough, and suddenly found himself a fashionable physician.

Prosperity now set in for good and all. On June 26, 1739, he married the daughter of Dr. Moræus, at Fahlun, and shortly afterwards received the professorship of medicine at the Upsal University. His old enemy, Rosen, at the same time became professor of botany. By this time, however, a reconciliation had taken place, and an arrangement was made by which Rosen undertook anatomy and physiology, and Linnæus botany, materia medica, and natural history. Next came his appointment to the Botanic Garden, founded by the elder Rudbeck, and a command from the King to arrange and describe the royal collections. With the Queen he became a special favorite; for his knowledge was inexhaustible, and she was devotedly fond of natural history.

In 1757, after an offer from the King of Spain of a most flattering character, he was raised to the rank of a nobleman, and took the title of Von Linnë. The year afterwards he bought a country mansion and property, — an event to which he had always looked forward as the summit of his ambition. In this place, surrounded by lovely gardens, he spent the last years of his laborious life. In 1776, after enjoying a long period of immunity from every ailment except gout, — and this he relieved by eating wild strawberries, — he had an attack of apoplexy. The next year he had another, and after it a long illness which terminated in his death on the 10th of January, 1778.

In speaking of Linnæus as a benefactor, the following words of Professor Whewell will place his claims on a better footing than any title based merely upon his services to natural history as a special branch of study: "By the good fortune of having had a teacher with so much delicacy of taste as Linnæus, in a situation of so much influence, botany possesses a descriptive language *which will long stand as a model for all other subjects*." The nomenclature, or naming of species, was a work of immense toil, and was the result of explorations of the most varied kind. Not only his own travels, but the friends he had all over the world, furnished him with the specimens necessary for his investigations, so that his knowledge of the mere facts of the science and of kindred branches of natural history was immense. The services he rendered the sciences of zoölogy and medicine were by no means trifling, but they are dwarfed when placed beside the enormously greater services he rendered to all future scientists by the wonderful completeness of his method.[1]

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[1] It may be worth noticing that the catalogue of the British Museum contains no fewer than four hundred and twenty-four separate notices of works relating to Linnæus.

BARON HUMBOLDT.

[Born 1769. Died 1859.]

A GREAT traveller, like a great poet, must be born, not made. Yet it is not given to every one who has the inborn taste for travel to gratify his wish. As the old-world adage expressed it, *Non cuivis homini contingit adire Corinthum.* To one are given ample means and favorable opportunities, but they are made no use of. The proprietor lacks enterprise; he has no desire to leave his native shores; the wonders of far-off lands for him possess no charms. Another is devoured with a passionate and insatiable yearning, but it is accompanied by no hopeful dawn of opportunity. A rare few, by the exercise of an indomitable perseverance, may indeed create a way; but it is not *the* way which, had they been free to choose, they would deliberately have selected. Happy, then, is he to whom Nature has given the will and for whom Fortune has provided the way. Such a man was Frederick Henry Alexander von Humboldt. He was the second son of Major Alexander von Humboldt, a gentleman of considerable property, and was born at Berlin on the 14th of September, 1769. The year of his birth gave also to the world Napoleon, Wellington, Cuvier, and Chateaubriand. His childhood was spent at the château of Tegel, about three leagues from Berlin, in the midst of romantic scenery and on the shores of a beautiful lake. He began his education with his brother William, afterwards celebrated as a statesman and philologist, under the famous Joachim Henry Campe, critic, philologist, and translator of "Robinson Crusoe." Campe's method seems to have been such as would be appreciated at the present day. He looked upon physical development as of equal importance with mental,

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and believed that the study of science was as essential as the study of classics or philosophy. But the one thing which endeared him to the sons of Major von Humboldt was his translation of "Robinson Crusoe." Its perusal filled Alexander's already excited fancy with an eager longing for a life of exploration and adventure. At the end of one year Campe left them, and another tutor was found, who carefully continued the work so favorably begun. From Tegel they proceeded to the University of Göttingen, then noted for the exceptional learning of its professors. Among these were Blumenbach, who occupied the chair of physiology and comparative anatomy; Heyne, who taught classics and philology; and Eichborn, the biblical scholar and orientalist. At Göttingen Alexander made the acquaintance of an actual explorer. George Förster, Heyne's son-in-law, as a youth of eighteen, had sailed with Captain Cook round the world, and had seen with his own eyes the very things read about in "Crusoe." The companionship of Förster, therefore, decided Alexander von Humboldt's course of life. He resolved to become a traveller. After a brief continuance of scientific study, the two friends made a tour of the Rhine valley and through Holland, carefully examining the mineralogy of the localities traversed by the great historic stream of the Fatherland. From Holland they passed over into England. On his return Humboldt published a *brochure* entitled "Observations on the Basalts of the Rhine," written in support of the Wernerian or aqueous theory of rock-formation.

His next departure was for Freiburg, in order to learn from the lips of Werner himself as much as possible of the new science of geology. After two years' close application, assisted by frequent explorations of the mineralogy and botany of the neighborhood, he produced his second book, "Specimen Floræ Friborgensis Subterraneæ." This work obtained for him an appointment as Inspector of the Mines of Bayreuth-Anspach, in Franconia, and a seat at the Board of the Mining Council of Berlin. During the tenure of his inspectorship he founded the Public School at Streben. His duties included perpetual descents and examinations of the workings, enabling him to add largely to his practical knowledge. But the field was too narrow for his grasping intellect. In 1795 he resigned his appointments, and set out on a journey through Switzerland and Italy. To Italy he was drawn by the extraordinary discoveries of Galvani, at that time the talk of the scientific world. He visited the Italian savant, and repeated his experiments to the extent of submitting personally to painful and even dangerous operations in order to test for himself the truth of Galvani's conclusions.

About this time the death of his widowed mother led to the division of the large patrimony between the brothers. William, already married, resided in Paris. Alexander obtained his share only to dispose of it in order to increase his means for travel. After publishing the results of his studies in galvanism in a little book annotated by Professor Blumenbach, he is next found deep in the study of exotic botany at Vienna. Then comes a journey with the celebrated Leopold von Buch through Salzburg, Styria, and the Tyrol; but he was prevented from revisiting Italy by the war. In 1797, in company with a Mr. Fischer, he visited his brother in Paris, in which city he was destined to form an acquaintance which influenced many years of his life. Being already well known to scientific men, he was at once introduced to the most distinguished circles of the polite and learned capital. In these gatherings he first met Aimé Bonpland, a modest but highly gifted French botanist. The two students soon discovered that they possessed many qualities in common. Both were ardent, enthusiastic, and more than ordinarily versed in physical science; both possessed a special fondness for botany, and both were born travellers. But there was one serious difference, — Bonpland was poor. Happily Humboldt was rich, and he proposed a scheme of visiting the remoter continents. What should hinder their travelling together? Bonpland at first declined, being reluctant to become a burden on his generous friend. But Humboldt insisted. Accordingly they went as far as Marseilles to await the arrival of a vessel to take them across the Atlantic. After remaining for two months the expected frigate was found to have been so injured by a storm as to be unable to proceed. Humboldt therefore went forward to Madrid, his companion preferring to return to Paris until a more favorable occasion. In Madrid the fame of Humboldt's acquirements procured for him a most flattering reception. He was presented at Court, and in an interview with the King obtained free permission to visit and explore all the Spanish dominions in America. With this presage of success, Humboldt immediately wrote to Bonpland, who lost no time in joining the proposed expedition. Well furnished with the necessary scientific instruments, the two friends proceeded to Corunna, whence, on the 5th of June, 1799, they set sail in a Spanish corvette named the "Pizarro." They made a stay of several days at Teneriffe for the purpose of ascending the celebrated Peak, and making observations on the condition of the volcano and the natural history of the island. After a most successful exploration they resumed the voyage, noting both by day and night the ever-changing phenomena of sea and sky. By the 16th of July they reached Cumana, on the northeast coast of South America. Their first excursion was to the peninsula of Araya, and thence to the missionary stations in the mountains, where they were hospitably entertained. In these places it was the rule to consider every German a miner, and every Frenchman a doctor. This gave each of them plenty of occupation wherever they went, specimens of ore and of ailments being extremely plentiful. After some little time spent in examining the botany of Caraccas, they pursued their journey to the Llanos, or Great Plains, penetrating to the mission stations on the Orinoco. They next ascended that mighty river as far as the Rio Negro, and returned by way of Angostura to Cumana. Among places afterwards visited were Cuba, Carthagena, and the Maddalena, Santa Fé de Bogotá, Popayan, and Quito. From the latter city, the highest in the world, they proceeded to the Cordilleras, and ascended the great equatorial volcano of Chimborazo. In this famous attempt they reached the highest point hitherto attained by man, recording a barometrical reading equivalent to 19,798

English feet. A deep chasm in the snow sixty feet across prevented their gaining the summit; but they saw it through the breaking mist, and ascertained by observation that it rose a further height of 1,429 feet. It has since been estimated as somewhat higher. Though the loftiest peak in Ecuador, it is surpassed by three others in the whole range, — Sahama and Gualatieri, in Bolivia, and Aconcagua, in Chili. The last rises to the enormous altitude of 23,910 feet, and is still 6,000 feet lower than the highest point of the Himalayas. From Quito they went southward to Truxillo, and along the coast of that rainless land until they reached Lima. At Callao they made a successful observation of the transit of Mercury. Leaving Lima, they explored the coast to Guayaquil, and thence across by sea-route to Acapulco and Mexico. Mexico they traversed from side to side, inspecting antiquities, listening to traditions, and writing down folk-lore. After a rest of two months on their return to Havana, we find them again voyaging to the United States, and shortly afterwards busy inquiring into the commercial and political relations of the different cities of the Union, particularly Philadelphia and Washington. In 1804 they returned to Europe.

Such is a rapid sketch of the most famous journey of exploration perhaps ever recorded. It is certainly by far the richest in reliable information. Six thousand different species of plants were among the spoils of the expedition. But the great value of the five years' journey was the vast body of scientific investigations, the innumerable physical facts, the voluminous records of observations, made by the cultivated and enthusiastic travellers. Under the influence of Humboldt's poetic genius the dry records of scientific phenomena become transformed into brilliant pictures. His descriptions glow with the fervor of a genuine artistic imagination.

The "Personal Narrative" of the journey was published on the return of the travellers to Paris, and was shortly afterwards translated into English by Mrs. Williams. The "Edinburgh Review" was warm in its praises, and profuse in congratulations on the good fortune of the age in possessing a "traveller armed at all points, and completely accomplished for the purpose of physical, moral, and political information, . . . an astronomer, physiologist, botanist, one versed in statistics and political economies, a metaphysician, antiquary, and a learned philologist, possessing at the same time the enlarged views, the spirit, and the tone of true philosophy." [1]

Profoundly interesting, even to an unscientific reader, the "Personal Narrative" abounds with passages which arrest the most casual glance and fix the attention, till the reader becomes absorbed in the intense and sustained current of ideas. The literature of every nation is drawn into the fascinating story; and while the fancy is still charmed with some wondrous fact of nature, there flashes upon the page some brilliant and beautiful quotation from a favorite poet. The sight of the Southern Cross reminds the traveller of a splendid passage in Dante,—

> "Io mi volsi a man destra e posi mente
> All' altro polo e vidi quattro stelle," [2]

and so on. The expression of the guides, "'T is past midnight, —the Cross bends," has been often quoted; and this again brings to mind an incident in "Paul and Virginia." If one allusion misses the reader, another is sure to attract him. The widest and most varied reading alone can hope to keep adequate pace with the far-glancing mind of this master of description.

For twenty years after his return he lived quietly in Berlin, with occasional visits to Paris, but with scarcely any sign of literary activity. Being urgently requested by the Czar, he undertook at sixty years of age an expedition to Siberia and the shores of the Caspian. It was to some extent a fulfilment of a project formed many years before, when King Frederick William III., partly for this purpose, partly in recognition of his distinguished services, had granted him a pension of 12,000 thalers and an appointment in the palace. In 1842 he came in the royal train to England, and was present at the christening of the Prince of Wales. On his return he began to shape his great work, the "Kosmos," the final proofs of which he was still correcting in 1858.

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[1] Edinburgh Review, vol. xxiv. p. 134; vol. xxv. p. 88.

[2] "I turned me to the right-hand, and fixed my mind on the other pole, and saw four stars."

In person he was rather below the middle height, but robust and massive in build, with a clear blue eye, square brow, and a profusion of chestnut hair, not thinned with advancing age, but changed to a mass of snowy whiteness. He died on the 6th of May, 1859, and was buried beside his parents and brother at Tegel. A public ceremony in Berlin enabled the many who honored his character to pay their last tribute of respect to his memory. His life was indeed one of the most useful that man could hope to spend; yet in one of his last letters he writes, "I live joyless because of all I have striven for from my youth I have accomplished so little."

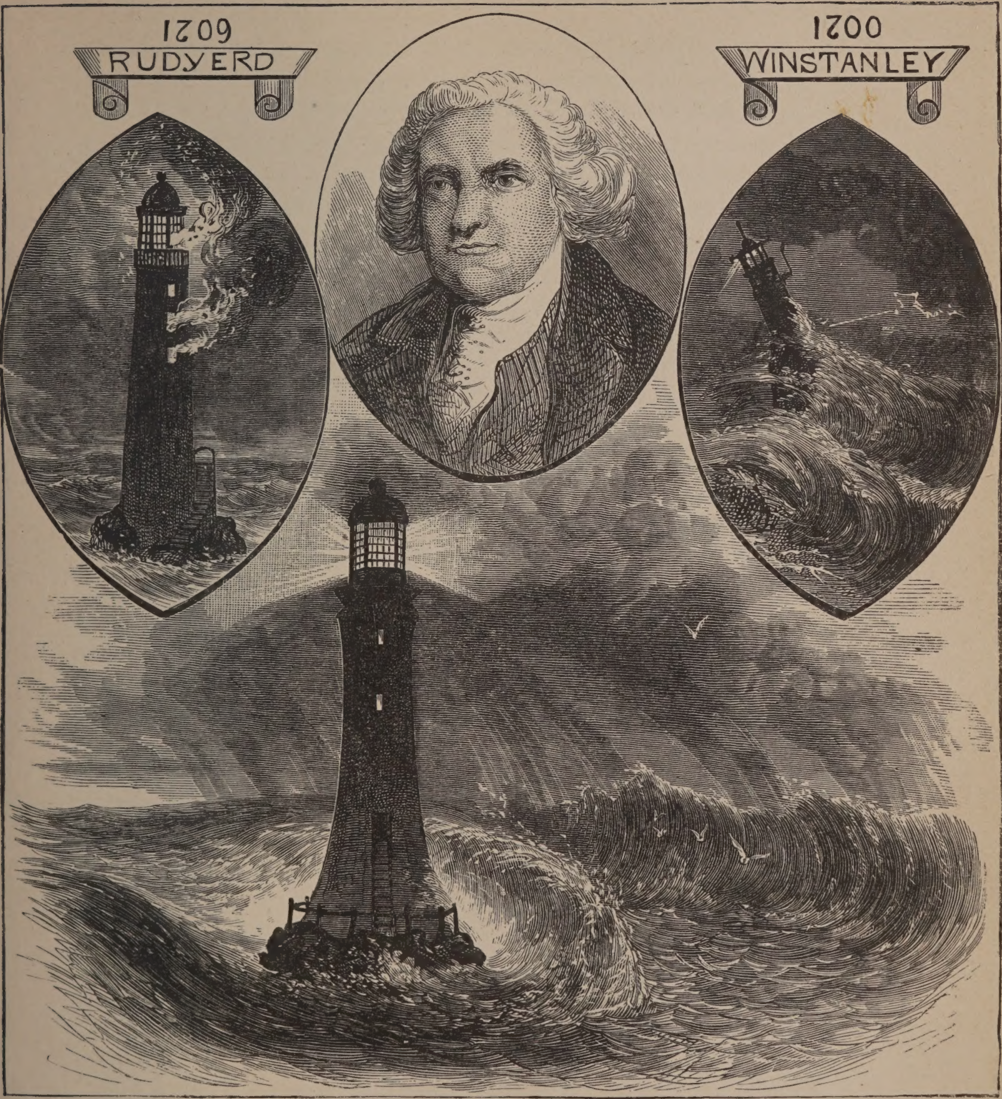
JOHN SMEATON.

[Born 1724. Died 1792.]

On some rocks named the Eddystones (probably so called from the whirl or eddy which is occasioned by the waters striking against them), about fourteen miles from Plymouth, stands the world-renowned lighthouse built by the great engineer Smeaton.

Before proceeding to the subject of the illustration, a few remarks on the lighthouses that were previously erected on these fatal rocks may be interesting.

The Eddystone rocks are never very much above the sea, and at high water are entirely covered by it. For centuries they were the most dangerous obstacle in the navigation of the Channel. As may be imagined, the erection of a light on such a position was a work of very great difficulty. Every year showed, by the number of wrecks, the absolute need of a mariners' warning; but nothing was done until about 1696. At last a Mr. Henry Winstanley, of Littlebury, in Essex,—a retired mer-



JOHN SMEATON.

cer and man of private means, but who had never received any education as an engineer or architect, — undertook the task which eventually cost him his life. He was a man who had a natural genius for mechanical pursuits, but he was essentially an amateur. It has almost become a proverb that "amateur work is always bad work," and it certainly proved so in his case. He began building the first Eddystone Lighthouse in 1696, and, in spite of very great difficulties, it was finished in four years. The design seems to have been the wildest idea that ever entered the mind of man. It was about one hundred feet high, polygonal (or many-cornered), built of wood, richly ornamented, and it had vanes, cranes, etc., presenting more the appearance of a Chinese pagoda than anything else. It was, though in the midst of a desolate sea, painted with mottoes of various kinds, such as "Post Tenebras Lux," "Glory be to God," "Pax in Bello." Perhaps he thought the last motto was suggestive of the intense strength of the building, standing amidst the wild war of the waters. It had a kitchen, rooms for the keepers, a chamber of state finely decorated, and a bedroom to match. There is a very scarce print in existence in which is a representation of this whimsical man absolutely fishing from the state-room window. He was warned over and over again by them "that go down to the sea in ships," that he had offered too much surface for the angry waves to beat upon; but he was so wrapped up in his hobby that he declared his willingness (in fact, his desire) to be in the lighthouse during the greatest storm that ever visited the Channel. He had his wish. He was in the lighthouse superintending some repairs, when a storm arose which swept the fantastic building away, and with it six unfortunate souls, including, of course, the architect. There was nothing left of the building itself the next morning; beams, iron bars, etc., were all carried away. The only item remaining was a piece of iron cable. This had got wedged into a crevice of the rock, and there it remained until it was cut out by Smeaton's workmen more than fifty years afterwards. The said piece of chain is still in existence in a private collection.

Apropos of this fearful storm, Addison, in writing a poem on the victory of Blenheim, used it as a simile in a very powerful manner. He compares the Duke of Marlborough, directing the current of the great action, to the Spirit of the Storm: —

> "So when an angel by divine command
> With rising tempests shakes a guilty land,
> Such as of late o'er pale Britannia past,
> Calm and serene he drives the furious blast;
> And pleased th' Almighty's orders to perform,
> Rides in the whirlwind and directs the storm."

This so pleased one of the ministry, that Addison received his first public appointment, the Commissionership of Appeals.

The rocks remained desolate; no one came forward to erect another signal light after such a catastrophe. About two years later a homeward-bound ship from Virginia, the "Winchelsea," struck on the Eddystones, and every soul perished. In 1706 a Captain Lovett (or Lovell) petitioned Parliament for an act to grant him a lease of the rocks for ninety-nine years. Strange to say, the builder *he* selected had not been brought up to that calling. Captain Lovett (or Lovell) selected a Mr. John Rudyerd, a *silk-mercer;* this time, of Ludgate Hill. There is no evidence as to the talent Rudyerd had displayed that he should have been selected for this task. The building he proposed was very different from its predecessor: it was not so high, being but ninety feet, and it was perfectly round; it was also built of wood. Strange as it may appear, though it encountered some particularly severe storms, — one on the 26th of September, 1744, especially, — it stood till December, 1755. Early in the morning of the 2d of December of that date, one of the keepers (the other two being asleep) went up to snuff the candles; on opening the light chamber he found it full of smoke, and the draught rushing in through the open doorway fanned the smouldering soot into flames. He called loudly for his companions, but they could not hear him. He tried his utmost to extinguish the fire by throwing water from a large tub which always stood on the floor of the room, but the fire was four feet above him. When his companions did join him they could do but little, as they had to go down and ascend a height of seventy feet before they could get the water to throw up to the flames. But the man who first discovered the fire remained at his post. His name was Henry Hall, aged ninety-four, but full of health and vigor. As he stood at his post, the lead from the roof became melted, and poured down in a torrent over his head and shoulders. Driven by this from the spot, he and his companions fled down the staircase and took refuge in a cave or hole in one of the rocks. Luckily it was low water, or they would have been lost. Some fishermen having seen the fire gave the alarm on shore, and crowds of boats were sent to their assistance. About eleven o'clock they arrived, but it was most difficult to get the refugees off the rock where they had taken shelter; by throwing a rope and dragging them through the water, they were rescued. One of the three disappeared as soon as he landed, and was never heard of afterwards.

By this time the proprietors of the rock and of its rights had greatly increased in numbers; they therefore felt it to their interest to erect another lighthouse immediately. A Mr. Weston, one of their number, applied to Lord Macclesfield, the President of the Royal Society, to nominate an engineer. His lordship strongly recommended Smeaton, and after the usual opposition which is sure to crop up when great talent has a chance to come to the front, he was selected to erect the third and present building. Smeaton had been apprenticed to a mathematical-instrument maker, but left that calling to become a civil engineer. He was to a great extent a self-educated man.

When he received the appointment to undertake the great work he was in Northumberland; but he arrived in London in February, 1756. He started for Plymouth on the 22d of March following; but the roads being bad he did not arrive at his destination until the 27th. He remained in Plymouth nearly two months, constantly visiting the rocks. Having got the consent of his employers, he decided that the lighthouse should be of stone. He set about hiring workyards and workmen, entered into contracts for the different materials, and settled all other necessary arrangements.

By the 5th of August everything was in readiness. The men were landed on the rock, and they immediately began cutting it for the foundation of the building. They could do no more than this the first season; but the peril to the workmen was very great.

The usual amount of hostile criticism was, of course, liberally showered on the great architect and engineer, and equally, of course, with the usual effect. Kind friends in crowds declared that no lighthouse, stone or otherwise, could ever stand on the Eddystone rocks.

The first stone of the lighthouse was laid on the 12th of June, 1757. The whole work was completed by August, 1759, and on the 9th of October following the building was finished.

On the 16th of the same month the saving but warning light gleamed across the waters. Smeaton says in his own book: "Thus was the work completed in three years without the loss of life or limb to any one concerned in it, or accident by which the work could be said to be materially retarded. The workmen had only 421 days, comprising 2,674 hours, during which it was possible for them to remain on the rocks; and the whole time which they had been at work there was only 111 days 10 hours, or scarcely 16 weeks."

Smeaton declares that he took the idea of the shape from an oak. It is a round building, gradually decreasing in circumference from the base and slightly increasing at the top. In Smeaton's work are diagrams showing the horizontal sections, which are most interesting. The ingenuity and knowledge shown in the dovetailing of courses of stone is simply wonderful. Among other storms it has withstood is the celebrated one at the beginning of 1762. It was declared by one of the "good-natured friends" that we all possess, "that he was really obliged to confess that, as it had stood that storm, it would stand until Doomsday." Smeaton's triumph was complete, and he stands in the history of all civilized nations as one of the greatest benefactors of our race.

His lighthouse — unlike Winstanley's, swept from its foundation; unlike Rudyerd's, burnt to its foundation — stands firm

COME TO THE SUBTERRANEOUS BARBER
1760
1732
1769
ARKWRIGHT
1792

SIR RICHARD ARKWRIGHT.

to this day, as strong as an oak; and the reason it is about to be removed is the strangest part of its history, — the very rock itself, the foundation on which Smeaton erected this noble work, is decaying, being in fact washed away by the waves.

Many a man has been ennobled for his doughty deeds as a soldier, many for their acumen in the law; but what reward is sufficiently great for a Smeaton or such as he, who by their genius give us the means of saving most precious lives and render the great highway of the deep safer to the imperilled mariner?

SIR RICHARD ARKWRIGHT.

[Born 1732. Died 1792.]

As the founder of the now enormous cotton-factory system of the world, Arkwright confessedly takes rank among the most active and foremost of the benefactors of his country and of his race. The bringing to perfection of his spinning-jenny alone has rendered his name lasting; while his other improvements in machinery and modes of manufacture add to the lustre of his name and to the veneration with which his progress in manufacturing improvement is regarded.

Born at Preston, in Lancashire, in 1732, Richard Arkwright was the youngest of a family of no less than thirteen children. His parents were so poor that he was never at school a single day, and grew up as best he might without help. As soon as old enough he was put to learn the trade of a barber, and in 1760 commenced business for himself in an underground shop or cellar at Bolton, over the door of which, it is recorded, he put up a board bearing the words, "Come to the Subterraneous Barber. *He* Shaves for a Penny," and by his low price got away much of the trade from the other shops in the town. To obviate this the others reduced their prices to a penny, when — and this was proof of the energy that characterized him in later life — he immediately reduced his terms to half price, and announced the fact on his boards with the expressive words, "A Clean Shave for a Halfpenny!" Afterwards Arkwright became, it is said, a barber at Wirksworth, in Derbyshire (near to which place he afterwards founded his cotton mills), and then took to travelling about the country buying and selling hair. Attending "statute fairs," he bought their long tresses from the country girls who there offered themselves for hire as servants, and he also went to villages and towns for the same purpose, — buying up and cutting off the hair and selling it to the wig and peruke makers. From this and the sale of a hair-dye he is said to have made money, and to have done a profitable trade.

Like many other men of his time, Arkwright caught the contagion of attempting the discovery of a "perpetual motion;" and this led him to contriving other machines to the neglect of his business and the loss of his money, — a neglect that his impoverished wife not unnaturally resented, and in a fit of desperation broke up his models as the only way she could devise of bringing back his attention to home and business. Provoked and wrathful beyond measure, Arkwright, whose character must have been harsh and vindictive in the extreme, and who had not learned the Christian principle of "forgive and forget," separated from her and never forgave the act.

Having become acquainted with a clockmaker at Warrington, named Kay, and got him to assist in his "perpetual motion machine," Arkwright received from him some hints and particulars regarding an invention of his own for spinning by rollers. "The idea at once took firm possession of his mind, and he proceeded to devise the process by which it was to be accomplished." To this he entirely devoted himself, and he and Kay constructed a machine which they set up in a room at Preston; but, fearing its destruction by a mob, he first took it to Nottingham, where he obtained pecuniary aid from Messrs. Wright, the bankers, and afterwards, at their suggestion, to Jedediah Strutt, the inventor of the "Derby Ribbed Stocking Machine," and his partner Mr. Need. Mr. Strutt — himself, through his inventions, a no small benefactor of mankind, and the founder of the house ennobled in the person of one of his grandsons, Edward Strutt, by the title of Baron Belper — at once entered into a partnership with Arkwright, a patent was secured, and cotton mills erected which ultimately made the fortunes of both the Arkwrights and the Strutts. From that time forward the machinery was constantly receiving improvements and becoming perfected; but the opposition he met, not only from the working people but from other manufacturers, nerved Arkwright to still greater efforts. Like George Stephenson and other great men, he "persevered," and success abundantly crowned his efforts. He became *Sir* Richard Arkwright, and died, it is said, a millionnaire. The mills at Cromford, in Derbyshire, built by him and his partners, became at the expiration of the partnership his own property. He built for himself, near at hand to them, a noble seat, Willersley Castle, and became the owner of large and valuable estates.

"It is not every inventor, however skilled," says Mr. Smiles, "who is a veritable leader of industry like Arkwright. He was a tremendous worker, and a man of marvellous energy, ardor, and application to business. At one period of his life he was usually engaged in the severe and continuous labors involved by the organization and conduct of his numerous manufactories from four in the morning until nine at night. At fifty years of age he set to work to learn English grammar and improve himself in writing and orthography. When he travelled, to save time, he went at great speed, drawn by four horses. Be it for good or evil, Arkwright was the founder in England of the modern factory system, — a branch of industry which has unquestionably proved a source of immense wealth to individuals and to the nation."

A blot on his fair fame was his unforgiving disposition towards his poor wife. Probably — but he could not see it — her destruction of his first models was to him a true "blessing in disguise;" for it served as an incentive to further and renewed and improved action, and resulted in his achieving a mechanical success that would never have been attained but for that "cross" which, in her poverty and out of love for him, she had "laid upon him." Who, therefore, can blame the young wife? Rather to her, probably, though she knew it not, and did not live to see her unforgiving husband's ultimate greatness, is, from that very circumstance, to some extent owing the success he achieved and the right to which he attained of being classed among benefactors of mankind.

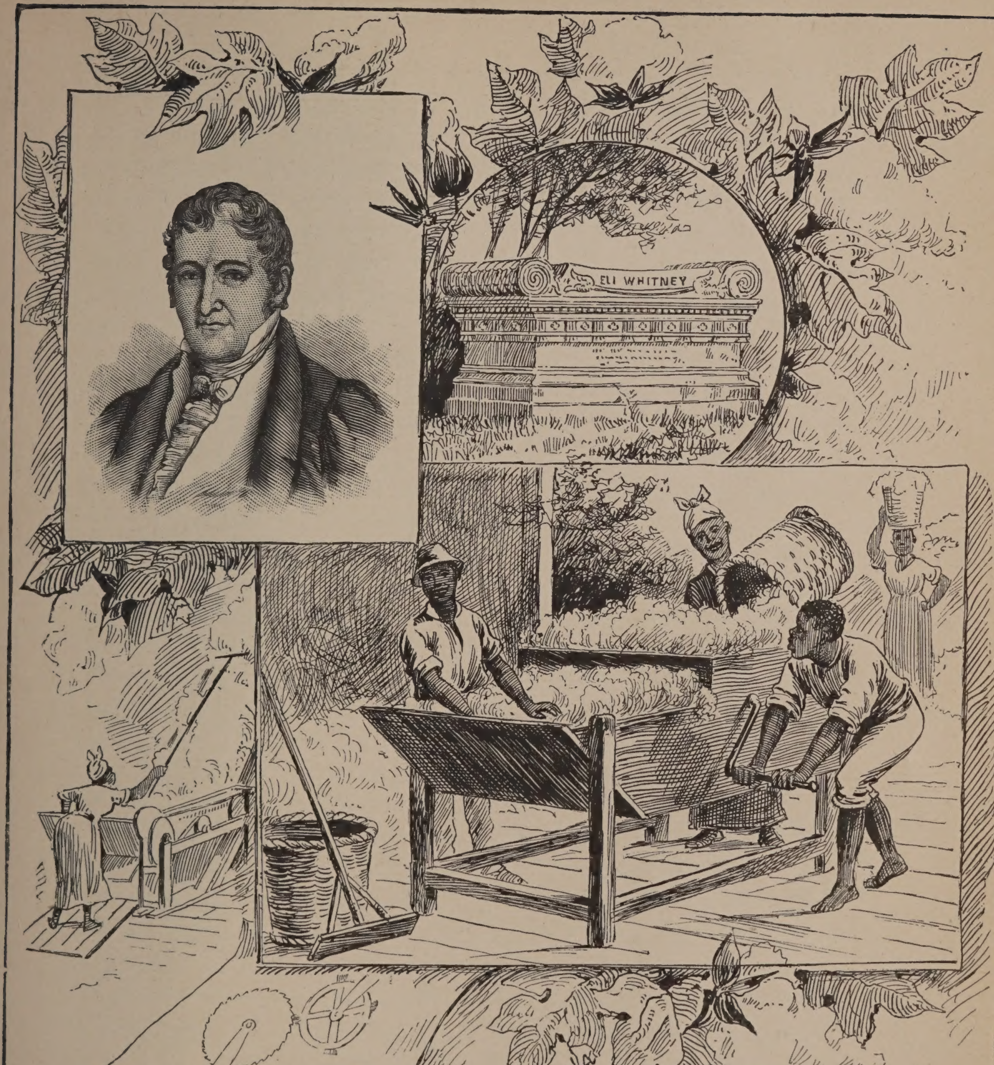
ELI WHITNEY.

[Born 1765. Died 1825.]

ROBERT FULTON declared that Arkwright, Watt, and Whitney were the three men who had done the most for mankind of any of their contemporaries.

Cotton manufacture in the United States goes only a little way back of the present century; and it became a possibility only through the discovery of a cheap, simple, and expeditious method of separating the fibre of the plant from the seeds that adhere to it. Without the invention of the cotton-gin, says a veteran American cotton-spinner, "it would have been impossible for this country to have supplied the raw material for the increasing wants of the manufacturer." "What Peter the Great did to make Russia dominant," says Lord Macaulay, "Eli Whitney's invention of the cotton-gin has more than equalled in its relation to the progress and power of the United States." It is furthermore a matter of record in the decision of Mr. Justice Johnson, of the United States Court for the District of Georgia, that it paid the debts of the South, and more than trebled the value of its lands.

So late as the close of the Revolutionary War, scarcely any cotton was produced in the Southern States. The great staples of that section were rice, indigo, and corn. England was then supplying America with cotton fabrics made from raw material grown in India, China, and Brazil; and through the inventive



ELI WHITNEY.

genius of Arkwright,[1] she had secured for her manufactures a monopoly of the markets of the world. No cotton at all was grown in South Carolina or Georgia before the year 1789, and very little in Maryland and Virginia; but the impoverished planters of those States had then begun to turn their attention to its cultivation, as promising better returns than their regular crops. They knew that Great Britain was consuming six or seven million pounds annually. They had slave labor and a productive soil. It is true that a cotton factory — the first in the United States — had been built in Beverly, Massachusetts, as early as 1787, and was certainly in operation two years later; but all the cotton used there had to be imported from the West Indies, where the labor of picking cost next to nothing. Payment was made for the staple in dried fish, that being the chief article of negro diet in those islands.

In the course of a few years' trial, the soil of the Southern Atlantic States had been found excellently adapted to the growth of cotton, and a considerable breadth had consequently been planted; still, so long as it took a negro a whole day to clean a single pound of raw cotton by hand labor, it was plain that the crop could not be made a profitable one. On the other hand, could some less costly method of getting rid of the seed be devised, the planters knew that their cotton would find a ready market both at home and abroad.

The subject was in this stage when, in 1792, a young New Englander, named Eli Whitney, went to Georgia in the hope of bettering his prospects. He was the son of a Massachusetts farmer, and had just graduated from Yale. He expected to teach for a living. Disappointed in his first purpose of keeping a private school, he began the study of law at Savannah; and, while pursuing his studies, he formed the acquaintance of the widow of General Nathaniel Greene, who was then living upon the plantation presented to her distinguished husband by the State of Georgia. This excellent lady took the poor law-student into her own house; and it was there, under her roof, that he first heard discussed the problem of how cotton might be made profitable to the Georgia planter. Whitney had shown much native ingenuity, as well as taste, for mechanical contrivance; and, one day, when the vexed question came up at Mrs. Greene's house, his benefactress warmly urged the young Northerner to try what he could do to solve it. The appeal and the occasion put him upon his mettle. Up to this moment Whitney had never seen either raw cotton or cotton-seed; but, inspired by the confidence of his benefactress, no less than by the greatness of the opportunity, he shut himself up in a room that Mrs. Greene provided for the purpose, and toiled with unremitting perseverance until he had produced an imperfect model of his since famous machine. This rude machine was first exhibited to Mrs. Greene and a select company of invited guests, chiefly planters, all of whom witnessed its successful operation with wonder, but with delight too; for with this contrivance it was seen that more cotton could be separated from the seed by the labor of a single hand in one day than could be done in the usual way in months.

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[1] See the preceding article.

The report of Whitney's wonderful machine soon spread abroad, causing great excitement among the planters and equal annoyance to the inventor, who naturally did not wish the public to see his work until he had thoroughly perfected it for practical use. He therefore refused to exhibit it in its incomplete state, which refusal so excited the ire of some lawless or unprincipled persons that they broke open the place where the machine was kept and carried it off. Although the fruits of his toil were thus wickedly wrested from him, the inventor could obtain no redress; for the planters selfishly banded themselves together to resist any effort to bring the perpetrators of the outrage to justice. This is an accurate, though by no means flattering, view of the morals of the time. So, although he had thus fully met the demand made upon his genius, Whitney was not permitted to reap the reward of his labors. In Georgia he was at the mercy of the mob. He therefore returned to Connecticut in the spring of 1793, constructed a new model, and applied for a patent. His application encountered the determined opposition of those who either had profited by the outrage in Georgia or who expected to do so in the future. In the meantime duplicates of the original cotton-gin had been made from the stolen model, as if it were public property, and were in use on many of the plantations before the inventor's rights could be protected by the patent laws. Against all these obstacles Whitney, however, struggled manfully; and having at length secured his patent-right, he began the manufacture of his machines at New Haven. He now began to receive some pecuniary benefit. South Carolina purchased for $50,000 the right to use the gin in that State. North Carolina also agreed to pay the inventor a royalty for every cotton-gin put in operation within her borders. Some of the other Southern States promised the like encouragement, but did nothing. In view of the fact that Whitney's discovery had already doubled the wealth of the cotton-growing States, these results seem ridiculously small; but when it is known that every dollar that Whitney had thus received was either spent in lawsuits brought to secure the payment of these sums, or to stop the infringements made upon his gin, they appear still more so. Convinced at last that for him, at least, justice did not exist in the South, Whitney abandoned in despair the effort to obtain it. He had now to look elsewhere for the means of support. But such a mechanical genius as his could not long fail of appreciation. By the advice and assistance of his friend, Oliver Wolcott, Whitney now turned his attention to the manufacture of fire-arms for the Government. The arsenals were either empty or encumbered with old and unserviceable arms. The hopes and energies of the unfortunate inventor were newly aroused, though in an entirely different direction. Whitney's workshops at New Haven were in successful operation in 1808–9, turning out fire-arms of improved pattern and workmanship. He was the first person to make a musket so that each part could be fitted to any other musket. Thanks to the patronage of Governor Wolcott, who was then Secretary of the Treasury, Whitney ultimately amassed a fortune in the manufacture of arms, having introduced many novel features in the machinery he used, as well as the finished weapons he turned out. All his efforts to procure a renewal of the patent-right to his cotton-gin were, however, defeated by the Southern delegation in Congress; and so this gifted inventor and benefactor had the hard fortune to see his invention everywhere in successful use, and its merits fully acknowledged, while he stood begging for justice at the doors of those whom his genius had enriched. Mr. Whitney's death, in 1825, elicited the warmest encomiums to his personal worth as a man; but his experience as the inventor of the cotton-gin is a signal instance of the inherent selfishness of human nature that we can have no pleasure in putting upon record.

JAMES WATT.

[Born 1736. Died 1819.]

THOSE who knew James Watt as a boy must have been very undiscerning if they did not read in him the promise of greatness. Frail and sickly, he was, nevertheless, brimful of intellectual life. Ardently loving fiction, making and telling striking tales, wandering alone at night to watch the stars, scrutinizing every instrument and machine that fell in his way to master the *rationale* of its uses, engrossed with the "Elements of Natural Philosophy," performing chemical experiments and contriving an electrical machine, dissecting, botanizing, breaking the rocks for mineralogic specimens, working in metal, making miniature cranes, pulleys, capstans, and pumps, entering the cottages and gathering the local traditions of the peasants, — such was the wonderful boy of fifteen who afterwards said, "I have never yet read a book or conversed with a companion without gaining information, instruction, or amusement." At nineteen the adventurous youth tried his fortune in London; and, after many a struggle and trial, returned to Scotland, and at one-and-twenty was installed in the quadrangle of Glasgow

JAMES WATT.

College as "Mathematical Instrument Maker to the University." Here he carried on a trade in quadrants and musical instruments of his own making. He built an organ, and it was the admiration of musicians. Students and professors frequented his shop. Robison, afterwards professor of natural philosophy, expected to find in him a workman, and was surprised to find a philosopher. Other proficients besides Robison frankly acknowledged their inferiority to Watt; and they did so the more readily because they could not help loving the naïve simplicity and candor of his character. To Robison he owed one invaluable suggestion, — the application of steam to the moving of wheel-carriages.

It is a mistake to suppose that there was no steam-engine before James Watt. There was that of Newcomen, on which he had to improve. But the problem of adequate improvement was dark till, in a lonely walk one Sunday afternoon in the spring of 1765, the solution of it flashed upon his mind. But many long and laborious years were needed before he could bring to perfection the engine which was completed in thought. Blacksmiths and tinners were the workmen available for his purpose in Glasgow; no capitalists there were likely to take up the steam-engine. Several thousand pounds would be required to give a fair trial to his apparatus; and if Dr. Roebuck had not become his associate he might never have been able to bring his grand invention before mankind. At length, in 1768, the model was finished; but a model is to a mechanic only what a manuscript unpublished is to an author. The patent was obtained in 1769, but much still remained to be done. Limited means depressed his spirits, and the almost insuperable difficulties caused by bad mechanical workmanship proved dreadfully disheartening. "Of all things in life," he said in moments of despondency, "there is nothing more foolish than inventing." And again he wrote: "To-day [Jan. 31, 1770] I enter into the thirty-fifth year of my life, and I think I have hardly done thirty-five pence' worth of good in the world."

It was in the midst of the most trying calamities — calamities such as generally befall those who are to benefit their kind largely — that Watt entered into partnership with Boulton, himself a great designer, contriver, and organizer. It was he who said to Boswell in 1776, in reference to his manufacture of steam-engines in Soho, "I sell here, sir, what all the world desires to have, — POWER." Seven hundred men were at that time working in his factory. But the capital invested by him in the undertaking amounted to £47,000 before any profits began to be derived from their sale. Even with the extension of the patent, it was not till after 1783 that Watt and Boulton had the satisfaction of finding that there was really a balance to their profit. At length their long toil, perseverance, and patience were rewarded in a pecuniary point of view; but they would have enjoyed the higher satisfaction of having benefited mankind even if they had died beggars. Their first experiments were made in Cornwall, where the size, swiftness, and horrible noise of the engine greatly astonished the natives. "The struggles," Watt wrote to Dr. Black, "which we have had with natural difficulties, and with the ignorance, prejudices, and villanies of mankind, have been very great, but I hope are now nearly come to an end." Yet they continued unabated; and so also did his headaches and despondency. "Solomon," he wrote bitterly to Mr. Boulton, "said that in the increase of knowledge there is increase of sorrow; if he had substituted *business* for knowledge, it would have been perfectly true." Attempts to pirate his inventions sharpened his distresses. Ordinary mechanicians made their fortunes by these despicable means. It had been so during life: his drawing-machine, his microscope, his crank, had been appropriated and purloined, and now the same fate threatened the condensing-engine on which he had bestowed twenty years' toil. The Cornish miners, with the most selfish dishonesty, sought to evade the payments which they had stipulated to Boulton and Watt. Thousands of pounds had to be spent to vindicate the rights of the patentees; and though invariably successful, the anxiety these legal processes caused to Watt's too sensitive mind were such as can be imagined only by those who have been drawn against their will within the whirlpool of law courts. Invention to Watt was martyrdom;

yet so strongly did the inventive instinct work within him that his physicians strove in vain to dissuade him from further inventions. New contrivances continued to be the pastime of his leisure hours; and thus to his irrepressible genius for mechanism were due the machine for copying letters, the instrument for measuring the specific gravity of fluids, his regulator lamp, his machine for drying linen, and his plan of heating buildings by steam.

Notwithstanding all his troubles and trials Watt lived to old age, and enjoyed a remarkable exemption from the infirmities usually incident to it. Until eighty-three years old he went daily into his workshop after answering letters, and was often seen in the company of the men of the day most illustrious in literature and science. Walter Scott, Jeffrey, and Mrs. Schimmel-Penninck have all left us most interesting records of his amiability and extensive knowledge. Scarcely a subject could be started in which he was not at home, and wherever he went he proved a centre of attraction. Even little children thronged around him. We stand amazed at the enormous results of the activity of a single mind, when we cast our eye over a railway map and think of the impetus his invention has given to the life of the civilized world. Nor have these results reached their goal. To remote posterity they will appear only to have just begun; for it is impossible for us even to conjecture to what ends, and to how many, the use of steam locomotion may in future be applied. There is an interaction among discoveries which makes their value increase in geometrical proportion as they succeed one another; but we may be sure that, however great and numerous may be the improvements in steam machinery, posterity will never forget the name of James Watt nor disown their obligations to his genius. The pen of Brougham has not exaggerated his merits in the epitaph on the statue of James Watt in Westminster Abbey executed by the chisel of Chantrey. The great lawyer was well employed when he wrote it; and so was the great sculptor when he preserved in marble the memory of so great a man.

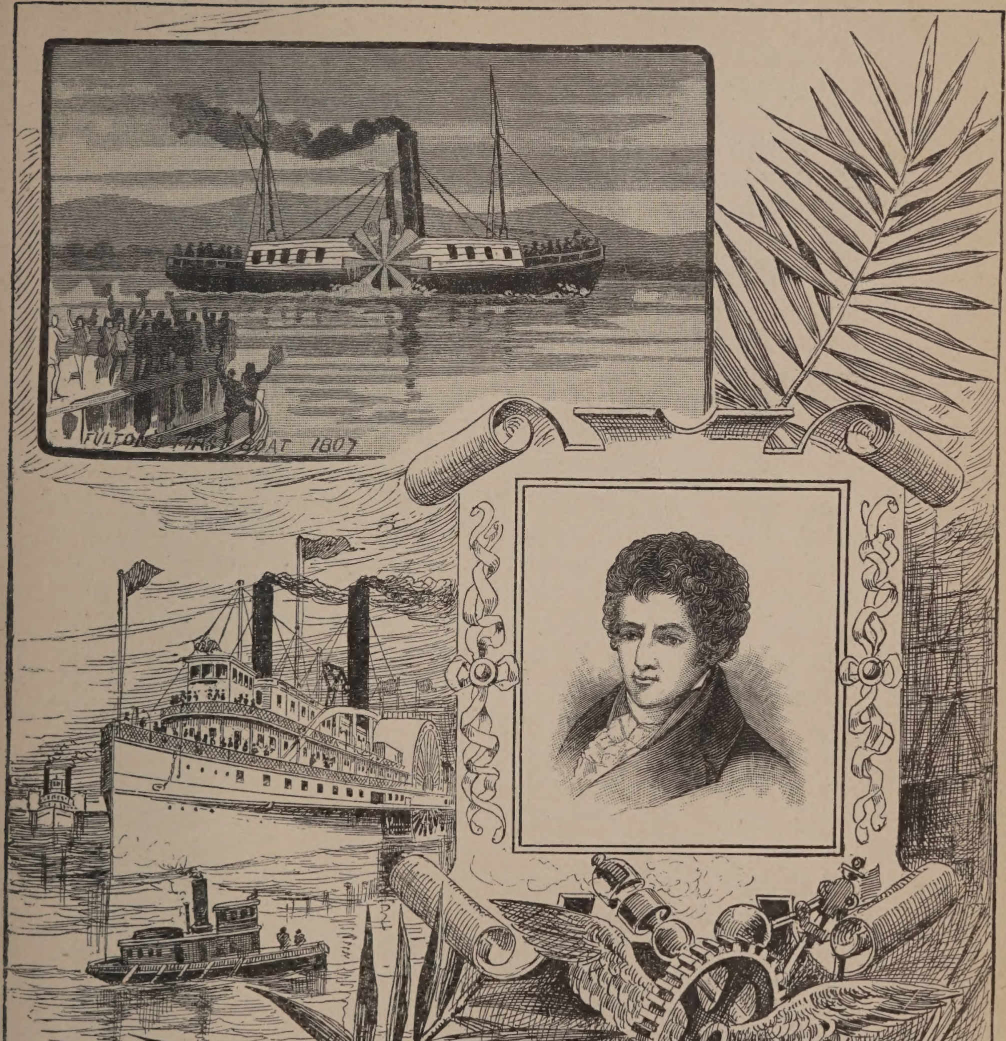
ROBERT FULTON.

[Born 1765. Died 1815.]

WE who are accustomed to travel in the floating palaces of our day at a speed of from fifteen to twenty miles an hour, look back with wonder upon the first feeble attempts that were made to propel vessels by steam. The wonder increases that the discovery came so late as it did; for we are hardly able now to realize by what slow stages steam locomotion advanced to assured success. Now that steam itself is hardly swift enough to satisfy the demands of our hurrying age, the idea of travelling four or five miles an hour may well cause a smile; but to seriously consider that it is only three quarters of a century since even this slow rate of progress was considered one of the grandest achievements of modern times almost passes our ability.

Successful application of steam to navigation is unquestionably due to the persevering efforts of Robert Fulton; because, while Fitch and others had the same idea that he had, and were pursuing it in their own way, he outstripped them in the race by superior genius. Many had already tried and failed where Fulton at last succeeded, so that the world gives no more than its just reward to his patient and unremitting labors when it places Robert Fulton's name upon the roll of benefactors, "not for an age, but for all time."

Yet how simple the problem seems to us in the light of present knowledge! To so apply the power of the steam-engine to a shaft as to drive a water-wheel, — this was all. And how to do it was puzzling the inventors of Watt's and Fulton's day, — inventors who had already settled it in their own minds that the thing was entirely feasible. So indeed it seemed; for the steam-engines of Watt and Boulton were already doing wonders



ROBERT FULTON.

in the way of mechanical labor, and were slowly opening the eyes of inventors to the greater possibilities that lay in the future of steam power.

Robert Fulton was one of those rare minds whose intellectual activities must of necessity lead to some brilliant result. In the popular phrase, he was born great. His early career and that of his countryman, Morse, are, up to a certain point, almost identical; for he, like Morse, had chosen the profession of a painter, and he too had been a pupil of West. It was while he was in England, working over his easel, that Fulton's mind began definitely to take the direction of mechanical science, — a study in which he ultimately became absorbed to the exclusion of everything else. He realized that it was his true vocation. Yet his earlier projects, valuable as they were, seem only to have been so many steps towards higher achievement. For several years he applied himself closely to the study of civil-engineering, and especially to the improvement of canal navigation. In 1797 Fulton went to Paris, where the friendship of Joel Barlow procured for him an entrance into the brilliant coterie of *savans* which the sagacity of the First Consul had attracted to his fortunes. War was then the business of Europe, and warlike inventions superseded for the moment every other in importance. During Fulton's residence in Paris he had the good fortune to meet Chancellor Livingstone, the American minister, who thenceforth became the inventor's fast friend, generous patron, and active coworker; for Livingstone himself had been seriously occupied with the question of steam navigation, and in Fulton he had at last found the man who was capable of bringing this grand scheme to a fortunate conclusion. On the other hand, in Livingstone Fulton found a patron possessed of large and varied attainments, of commanding influence and position, and of ample wealth, who had, moreover, the success of the project to which his own life was devoted quite as much at heart as himself; so that the alliance promised only the best results.

Exactly what Livingstone and his associates had accomplished before Fulton joined them, is not clearly perceived.

Some experiments had been made; and when it is known that these experiments had advanced so far that, with characteristic foresight, Livingstone, in 1798, had secured from the State of New York an exclusive privilege to navigate with steam-vessels the waters of that State, we are prepared to believe either that certain results were looked for, or that Livingstone desired a monopoly that would enable him to carry on his experiments at leisure. This was three years before he met Fulton in Paris. His application had been treated with derision by the legislature, but it had been successful; and so a way for making the invention profitable, when it should come, was prepared.

After experimenting two years, Fulton produced, in 1803, a boat that made under steam a successful trial-trip on the Seine. The grand schemes of Napoleon had also set the American inventor's brain at work upon a series of experiments that resulted in the perfection of his submarine torpedo, which is certainly one of the most original as well as one of the most destructive engines of modern warfare. The steamboat was, however, his fixed idea. In 1806 Fulton returned to the United States, and from this moment he applied all the resources of his mind to the subject of steam navigation. He immediately set about building a boat one hundred and thirty feet long, eighteen wide, and seven deep. An engine was ordered from Watt and Boulton. All the machinery was uncovered, and its working exposed to view. Fulton's principle was the familiar one of working paddles by a shaft extending outside the hull. These paddle-wheels were only fifteen feet in diameter, with a dip of two feet. When the "Clermont" was completed, — for she was so named from the Livingstone manor on the Hudson, — and it was announced that on the 4th of August, 1807, the boat would start on a voyage of one hundred and fifty miles, to Albany, under steam alone, public expectation was raised to fever heat. Underneath this there was, however, a general feeling of incredulity in the success of the scheme, and of pity for the visionary Fulton and his misapplied talents. But when the hour fixed for the trial actually came, — when the "Clermont" was unmoored, her rude engine started, and, steaming slowly out upon the broad river, she began her eventful voyage in the midst of an ominous silence on the part of the multitude of spectators, then came a moment of supreme suspense for the anxious inventor, which it will be best to allow him to describe in his own way.

> "The boat moved on a short distance, and then stopped and became immovable. To the silence of the preceding moment now succeeded murmurs of discontent, whispers, and shrugs. I could hear distinctly repeated by those around me: 'I told you so; it is a foolish scheme. I wish we were well out of it.' I stepped up to where I could be heard, and spoke to them. I stated that I knew not what was the matter; but if they would be quiet and indulge me for half an hour I would either go on or abandon the voyage for that time. This short respite was conceded without objection. I went below, and examined the machinery, and discovered that the cause was a slight maladjustment of some of the work. In a short time it was remedied. The boat was again put in motion. She continued to move on. All were incredulous; none seemed willing to trust to the evidence of their own senses."

The passage of the "Clermont" up the Hudson was a triumphal progress. Multitudes flocked to the shores to see this strange craft moving steadily on without the help of wind or sails. In thirty-six hours she had steamed the one hundred and fifty miles to Albany without meeting with the least accident. With modest triumph Fulton records that the "Clermont" had overtaken the various sailing craft, and had passed them as if they had been at anchor. The following letter gives too concisely his own account of the voyage. We append it as a literary curiosity: —

NEW YORK, Aug. 20.

TO THE EDITOR OF THE "AMERICAN CITIZEN:"[1]

SIR, — I arrived this afternoon at 4 o'clock, in the steam Boat from Albany. As the success of my experiment gives me great hope that such boats may be rendered of much importance to my country, to prevent erroneous opinions and give some satisfaction to the friends of useful improvements, you will have the goodness to publish the following statement of facts: I left New York on Monday, 1 o'clock, and arrived at Clermont, the seat of Chancellor Livingston, at 1 o'clock on Tuesday, time 24 hours, distance 110 miles. On Wednesday I departed from the Chancellor's at 9 in the morning, and arrived at Albany at 5 in the afternoon, distance 40 miles, time 8 hours; — the sum of this is 150 miles in 32 hours, equal to near 5 miles an hour. On Thursday, at 9 o'clock in the morning, I left Albany, and arrived at the Chancellor's at 6 in the evening; I started from there at 7, and arrived at New York on Friday at 4 in the afternoon, time 30 hours, space run through 150 miles — equal to 5 miles in an hour. Throughout the whole way, my going and returning, the wind was ahead; no advantage could be drawn from my sails — the whole has, therefore, been performed by the power of the steam-engine.

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[1] Then the other name of the "Commercial Advertiser."

I am, Sir, Your most obedient

ROBERT FULTON.

GEORGE STEPHENSON.

[BORN 1781. DIED 1848.]

THE inventor of the locomotive steam-engine was born in a village of Northumberland in 1781. His earliest recollections were of the colliery of which his father was fireman, and Dewley Burn, where he herded cows and in his leisure modelled clay engines and constructed a miniature windmill. Promoted, when a boy, from being fireman of an engine to be plugman, he would sometimes take the machine to pieces and put it together again in order to understand it the better. At eighteen, when earning but twelve shillings a week, he attended a night school, and from learning to read and write his name got on to learn arithmetic at fourpence a week. At twenty he was brakesman; big, raw-boned, temperate, industrious, athletic, and, though not combative, ready to defend himself if "put upon."

With the new century he married Fannie Henderson; and the ballast brought by the collier ships to Newcastle looked to him to be lifted out of the hold. He lived at Ballast Hills,

GEORGE STEPHENSON.

gave much time to mechanical experiments, labored in vain to procure perpetual motion, and became clock cleaner and mender to the whole neighborhood. This was better than cobbling and shoemaking, which he had practised at Newburn to earn pence for the schoolmaster. In 1803 his first and only child was born, his wife died, and the next year he superintended the working of one of Boulton and Watt's engines at Montrose. Provisions were at war prices; but he saved £28 in a year, and returned to Killingworth to help his father, who was in deep distress. He rose only by slow degrees, and from engineman at Killingworth colliery he became engineer with £100 a year.

He was now over thirty years of age, and the most important epoch of his life was at hand. He had seen many attempts to construct a locomotive steam-engine, and had come to the conclusion that he could surpass them all. Hitherto every success had been also a failure, for none had combined economy and efficiency. Lord Ravensworth was one of his employers, and to him he communicated his design. He obtained a patient hearing, and was commissioned to make a trial. His plan at first was to make one for the colliery tramways only; but he foresaw, even at this stage of his labors, that "there was no limit to the speed of such an engine, if the works could be made to stand it." But how great were his difficulties! An engine built in the workshops at West Moor, the tools themselves to be made, the colliery blacksmith the chief workman, and everything resting on the designer! However, in ten months it was finished; and he placed it on the railway, July 25, 1814. It was successful, though cumbrous and capable of great improvement. It drew eight loaded carriages, weighing thirty tons, at the rate of four miles an hour. But it cost about as much as horse-power; the waste steam escaped freely into the air, and it went hissing away with a tremendous noise, while the lookers-on laughed and called it "My Lord." True genius is not to be baffled with difficulties; rather they are its life. Stephenson saw a remedy for the waste steam. He invented the steam-blast, — that is, made the waste steam promote the combustion of the fuel, — and by that means doubled the engine's power without any increase of its weight. This however, did not satisfy him. Next year he made another engine, which must be regarded as the type of the present locomotive engine, though it has been considerably modified in minor details.

During the nine years that elapsed from 1816 to 1825, Stephenson was constantly advancing from one step to another of improved locomotive machinery. He found that the tramroads were carelessly kept, and that a firm bed and a regular level were essential requisites. He took out a patent for an improved form of rail and chair; and he placed the locomotive engine on springs, and applied his latest invention to the conveyance of goods. The railway which he constructed for the owners of Hetton colliery was opened for traffic in 1822; and he found a wider field for his talents in the construction of the Stockton and Darlington line, of which he was appointed engineer. He worked at it with a will; started every morning with his dinner in his pocket, and got it cooked wherever he happened to pass about noon. The eyes of Parliament and of the nation were now upon him, though many jeered at his enthusiasm. At last the line was opened by an engine which he drove himself. It drew a load of ninety tons at the rate of over eight miles. It was highly remunerative, and served for goods and passenger traffic. This one railway has done much for society. The town and port of Middlesborough-on-Tees, with eight or nine thousand inhabitants, has taken the place of a solitary farm; and where a few heads of cattle strayed and pastured there are now reading-rooms and a national school, an observatory, manufactures of rope and sail-cloth, iron-works, yards for shipbuilding, commodious docks, and extensive exports of coal. All this has come of Mr. Pease's Darlington line, with Stephenson for its engineer, and the old stage-coach mounted on a truck used as a passenger carriage, and called "The Experiment."

His great trial of strength was yet to come. It was proposed to run a railway with a train of a hundred tons weight across the spongy and impassable Chat Moss between Manchester and Liverpool. Stephenson said he could do it; but though every obstacle was thrown in his way, he fought his battle single-handed, and he won it. He obtained his bill and constructed his railway. The best part of the line is that which crosses Chat Moss; and that part cost no more than £28,000. He placed on this line his latest improvement, the "Rocket," which had won the prize of £500 offered by the directors, and he drove it himself thirty miles an hour. The object of his life was now achieved, and in it he acquired the reward of his labors. Wealth of course filled his coffers, — at least, all the wealth he desired, and more than he needed. As to titles and honors, he would not put out his hand to take them. He would die, he said, with the name he was christened by, and would have "no flourishes to it, either before or after."

George Stephenson was assisted in his labors by his son Robert, who afterwards became almost as distinguished as his father. Occupation of a most remunerative kind poured in upon them; and the father was incessantly engaged till 1840, when he resigned most of his engagements, settled at Tapton, in Derbyshire, and found in the Clay Cross collieries a fresh pursuit. Often he visited the Mechanics' Institutes in his neighborhood, and encouraged them by relating the circumstances of his own career. His interest in railway extension continued undiminished; and he took part, as engineer, shareholder, or chairman, in the Maryport and Whitehaven, the Norwich and Yarmouth, and the Edinburgh and Newcastle East Coast line, with which is connected the stupendous high-level bridge at Newcastle, designed by his son. Of this last work he was one of the committee of management, but his life was not prolonged to see its completion. He travelled also in Belgium and Spain in connection with some railway projects; but on returning from the latter country, in 1845, he bid a more complete adieu to railway matters, and devoted his time almost entirely to his lime-works and collieries, his farm and garden, and revived his early taste for keeping birds and animals. Though he was invariably kind and attentive to the numerous applications he received for advice and assistance, he kept himself as free as he could from projectors and inventors of all kinds, and thus passed the decline of his life in peace and ease, witnessing the diligence and success of his son, who was destined to perpetuate his father's name and his reputation. He died on August 12, 1848, one of the heroes of social science, and one of the illustrious "men who have made themselves."

"As evidence of the singularly 'matter-of-fact mind' of George Stephenson," says S. C. Hall, "I have to state this. When the bill for the formation of the Chester and Birkenhead Railway was passing through Parliament, I met Stephenson at dinner with a small party of railway directors. Hope was giving scope to joy; the bill had gone through the Commons. When the toast, 'Success to railways' was given, I turned down my glass and refused to drink it, on the ground that the promoters were enemies to the *common-weal* of Great Britain. A poor pun; but Stephenson began to argue with me as to the fact that for every common *wheel* put out of use, a wheel of infinitely greater value would be adopted. The dinner took place at a tavern, now gone, close to old Westminster Bridge and commanding a full view of the arches. Their bill had reached the House of Lords. I perpetrated another poor pun. 'Ah!' I said, 'I see why you patronize this house; it is that you may cultivate acquaintance with *the Piers;*' upon which Stephenson earnestly explained to me that, 'the bill being sanctioned by the Commons, it was impossible that it could be rejected by *the Peers.*' A play upon a word would have been as unintelligible to the marvellous old man as a treatise on algebra to a native of Newfoundland. In calling to memory George Stephenson, I picture a remarkable mingling of the *suaviter in modo* with the *fortiter in re.* A ponderous head that seemed overladen, a body that it appeared not easy to move from one chair to another, — burdened with a weight of thought. But his was a countenance most expressive of a kindly nature; it was

BLACK MIDDINS ROCKS, MOUTH OF THE TYNE.
THE GREATHEAD LIFEBOAT AT SEA
LIFE BOAT

HENRY GREATHEAD.

handsomely manly, with much of loving-kindness, requiring but a prompter to the exertion of sympathy and ready help. I could fancy him striving to stop a steam-engine in full career, that a sparrow might get out of the way. I knew little of him and nothing of his domestic relations; but I am greatly mistaken in my estimate of the man, if he was other than tender, loving, and affectionate, as well as generous and just. It was my privilege to meet Robert, the son of George, frequently at the hospitable board of the sculptor Lough; like the great engineer, Lough was a "self-made man," and not ashamed of so honorable a distinction. Sir Robert Stephenson was, as far as 'externals' went, a great improvement on the father: a remarkably handsome man he was in form and features; of no great conversational powers, — at all events, after dinner. It was not 'natural' that he should have left earth so early as he did; his work was but half done. Have these two great men bequeathed to any 'son succeeding, the cloak the one inherited from the other'? These are but weak recollections of two great men. If I had known more of them, as I might have done, I should have told more; but surely the smallest scrap of information concerning such true heroes of labor, whose long pedigree is that of toil, is of some value."

HENRY GREATHEAD.

[Born 1757. Died 1813.]

IT is the Briton's national boast that Britannia rules the waves. Whether or not Henry Greathead was that particular Briton who invented the life-boat has been a matter of some discussion, since this credit is claimed on behalf of two others, by name Lionel Lukin and William Wouldhave. The first of these two was a native of Dunmow, an inland town in the county of Essex. He afterwards removed to London, established himself as a coach-builder in Long Acre, and then conceived the idea of constructing a boat partially of wood and partially of cork. He enjoyed the patronage of the then Prince of Wales, afterwards George IV.; and in 1784 a boat built by him, and termed "unimergible," passed a successful trial on the Thames. He obtained a grant of letters patent in 1785; but his scheme does not appear to have made any progress beyond that the Rev. Dr. Shairp, of Bamborough, hearing of his invention, sent him an ordinary coble to be made "unimergible.' This was done. The boat was stationed at Bamborough; and it is said to have been instrumental in saving several lives, but whether or not in seas in which no ordinary boat could have lived is unknown.

The subject then dropped until 1789, when a ship, by name the "Adventurer," of Newcastle, stranded on the Herd Sands at the entrance of the Tyne. A fierce gale was raging, the sea was running mountains high; thousands of spectators were present, and, though but three hundred yards from the ill-fated ship, were unable to afford the slightest succor. One by one the crew dropped off from the rigging; mothers saw their sons, wives their husbands, drowned before their eyes and within the very sight of home. This tragic event caused such an impression that a committee was formed in South Shields, and a premium was offered for the best design of a life-boat. A great number competed. The final decision lay between William Wouldhave of South Shields, a painter, and Henry Greathead of the same town, a ship-builder; and in the end it was given in favor of the latter; but the friends of Wouldhave claim that certain features of his design were adopted either by Greathead or the committee. There does not, however, seem to be much, if any, proof of this; and probably the real facts are that the idea originated with Lukin, who, however, was unable to master the practical details, as it is said that the sides of his boat were liable to be staved in, and that the boat itself, though buoyant, lacked balance; that Wouldhave improved upon the idea and might have been proclaimed the inventor, had Greathead never competed; and that the latter alone was sufficiently master of the theory and practice of ship-building to produce anything likely to prove of permanent benefit; and therefore to him must the honor be awarded, not as a privilege, but as a right.

Those, however, who may feel inclined to inquire further into the merits of the case will find every information in the book entitled "The History of the Life-boat," by Mr. Richard Lewis, Secretary to the Royal National Life-boat Institution; and it must suffice to add that Wouldhave afterwards became clerk to St. Hilda's Church, South Shields, and died in 1821, at the age of seventy years. A tombstone erected to his memory bears the following inscription: —

"Sacred to the Memory
of
WILLIAM WOULDHAVE,
Who died September 28th, 1821,
Aged 70 years,
Clerk of this Church,
And inventor of that national blessing to mankind the life-boat."

Below is the following epitaph: —

"Heaven genius scientifick gave
Surpassing vulgar boast, yet he from soil
So rich no golden harvest reaped, no wreathe
Nor that ingrate a Palm ; unfading this
Till shipwrecks cease and lifeboats cease to save."

A model of his invention can at the present time be seen suspended from the chandelier of the church.

Lionel Lukin retired from business to Hythe, and died in 1834; and the inscription on his tombstone also claims for him the honor of having invented the life-boat.

Henry Greathead was the son of John Greathead, supervisor and comptroller of the salt duties in South Shields and the adjoining neighborhood, who had married a daughter of Henry Raisden, a merchant formerly of York Buildings, London.

There was a large family, and the subject of this memoir was the fifth, and was born at Richmond, in Yorkshire, on the 27th of January, 1757. He was the worthy son of a worthy father, as the latter, to quote the words of the "European Magazine," in 1804, "was held in great esteem for his strict integrity and diligence during *forty-six* years that he continued in the situation."

Henry, when a boy, it is said, indicated a mechanical turn, and accordingly was apprenticed to an eminent ship-builder in South Shields. This life, however, proved too monotonous for him. He went to sea at first in the merchant service, but during the American War served in the Royal Navy, and afterwards, in the year 1788, was shipwrecked on the French coast while on a voyage to the West Indies. He then returned to South Shields, set up as a ship-builder, and in the following year, as before stated, gained the prize offered by the South Shields Committee.

In 1791 the life-boat was for the first time called into active requisition. A Sunderland brig again stranded at the entrance of the Tyne; but this time succor was at hand. The boat was launched, was manned by a brave and sturdy crew, reached the distressed ship, and succeeded in saving those on board. The success of this one boat, the first messenger of salvation constructed by human skill, but intrusted to the mercy of a divine Providence, encouraged not only other towns but also other countries to follow the example of South Shields; for in 1803 Greathead had built no less than thirty-one life-boats, of which eighteen were for England, five for Scotland, and eight for foreign countries.

A year before this he had applied to Parliament for a national reward, and a committee had been appointed to take evidence. The evidence adduced proved two things, — it proved that the life-boat was a blessing, and that Greathead was not alone an inventor but also a man of the greatest nobility of character; it proved that the life-boat had already been the means of saving two hundred lives at the mouth of the Tyne alone, — but it also proved that Greathead had taken no steps to protect his invention, and had never asked, much less obtained, more than an ordinary trade price for a single one of these boats.

Upon the report of this committee it was proposed to grant him a sum of £2,000, and Wilberforce eloquently urged his claims. The Government, however, thought that half this sum would be sufficient; but upon its being represented to them that the cost of his own and his witnesses' journey up to and stay in London had amounted to nearly £200, they consented to £1,200, and this amount was *unanimously* voted. The Trinity House added one hundred guineas, Lloyd's subscribed the same amount, the Society of Arts awarded him its gold medal together with fifty guineas, and the Emperor of Russia presented him with a diamond ring.

On the 23d of November, 1803, there occurred an episode which showed that Greathead possessed a large amount of physical courage in addition to a high mental capacity; for on that day the "Bee" of Shields put to sea, but encountering rough weather the captain determined to re-enter the Tyne. In taking the bar at the mouth the ship struck the ground, lost her rudder, became unmanageable, and finally drove on the rocks known by the name of the "Black Middins." A crowd assembled; and the same tragedy which had been the primary cause of life-boats ever having been instituted seemed likely to be re-enacted, for all declared that it was too rough for the boat to put out. Suddenly Greathead stepped forward, and offered to go out himself to the rescue if a crew would volunteer. His words had an electric effect on those present; hundreds stepped forward, and the difficulty now was whom to choose without offending the others. A selection, however, was finally made, chiefly consisting of pilots; the life-boat was launched, reached the ship in reality without any great difficulty, and rescued everybody on board without the loss of a single life.

After 1804 Greathead's career becomes somewhat enveloped in mystery and wrapped in gloom. It would appear that he embarked in certain speculations, and lost all the money which had been granted him by Parliament; for in 1807 his name appears in the "Gazette" among the list of bankrupts. At that period the Napoleonic wars were attracting the attention of the whole country, and amidst the bustle of war this benefactor would appear to have been forgotten. The very date of his death is uncertain, but is believed to have occurred in 1813;

and it is beyond a doubt that he was carried to his last resting-place, —

> "Unwept, unhallowed, and unsung."

This neglect has been continued; for his name is barely mentioned in some biographical dictionaries or encyclopædias, which cheerfully devote whole columns to the career of a successful clown or noted eccentricity.

If this date of his death be correct, he would have died at the age of fifty-six, eight years before the first life-boat ever built was lost. Some, however, built by him, are not only in existence, but even in use. Redcar has the oldest; it bears the date of 1802; and the sight of it some eight years ago inspired Viscount de Redcliffe to write some lines. They were set to music by Claribel, and the song was published under the title of "The Life-boat." No statue, even in Shields, has been erected to Greathead's memory. Well, perhaps none is wanted. Of Sir Robert Peel it was said that every policeman was a statue to his memory; and so with equal truth it may be said that every life-boat is a monument to the memory of Henry Greathead.

The good work begun in 1789, though it flagged for a time, has been carried on up to the present day. The British public is seldom stingy where "Jack" is concerned; and the Royal National Life-boat Institution alone, which is supported by voluntary contributions, and of which her most gracious Majesty is patroness, has no less than two hundred and sixty-nine stations, and was the means of saving eight hundred and fifty-five precious lives in one year.

It is true that the life-boat in use is somewhat different in construction from that designed by Henry Greathead. It now carries sail, and is technically known by the name of "self-righting;" but, nevertheless, Britain has every reason to be proud of that son of the Tyne whose invention it practically was, since it is blessed by the whole civilized world, and has been the means of preventing untold sorrow and incalculable misery.

SIR HUMPHRY DAVY.

SIR HUMPHRY DAVY.

[Born 1778. Died 1829.]

SIR HUMPHRY DAVY was one of those natural philosophers who specially contributed to the formation of modern thought. Without attaining to the highest distinction, his faculties were so well balanced, and his discoveries so numerous and brilliant, that he may be regarded as a representative man of his time and a pioneer of experimental philosophy in its latest developments. He was born on the 17th of December, 1778, at Penzance, in Cornwall, being the eldest son of Robert Davy, a wood-carver.

The childhood of Humphry was spent under the immediate care of his parents; and even in his earliest years he gave evidence of the possession of singular abilities. The first striking characteristic which manifested itself, one which distinguished him throughout life, was that of quickness of apprehension.

When a mere child he entered the grammar school at Penzance, and remained there until 1793. He was then removed to the care of a Truro clergyman; but unfortunately his opportunities for advanced education were cut short by his father's death in the following year. Soon afterwards he became articled to Mr. Borlase, a surgeon of Penzance, under whose tuition, though acquiring next to nothing of surgery, he gained that decided taste for chemical pursuits which eventually placed him in the front rank of scientific investigators. The passion for experiment indeed soon became insatiable. Everything that could on any pretence or by any contrivance be converted into a piece of chemical apparatus was appropriated without scruple. An old French injecting-syringe served him for an air-pump; and he used this when preparing his first scientific paper, "On the Nature of Heat and Light," which was published in 1799.

It was a happy day for Davy when he concentrated his attention on nitrous oxide gas. His own experiences under its influence were delightful, and it gave him a name among his countrymen. He found that by its means he could produce sleep, delicious dreams, and involuntary laughter; and it led him on to further discoveries in the gaseous department of chemistry. With the new century a new career opened for the aspiring chemist. An offer of Count Rumford, in connection with the Royal Institution, enabled him to devote himself entirely to science. There he became famous for his lectures, made his observations on flame, and constructed his safety-lamp, which has saved so many lives. Here, also, he made his first experiments in electro-chemistry, and achieved the superb triumph of decomposing substances by electricity. It was a grand thing to have discovered that by which you could literally take a substance to pieces and see the elements of which it consists. Having succeeded in decomposing water, he tried the effect of the electric current on potash and soda; and his brother says, "His delight when he saw the minute shining globules, like mercury, burst through the crust of potash and take fire as they reached the air, was so great that he could not contain his joy, — he actually bounded about the room in ecstatic delight." He had proved that potash was not a simple substance. He had discovered potassium and sodium. Thus the great principle was ascertained that chemical affinity can be overcome by a stronger power; and Davy prepared the way for Faraday, to whom we are most indebted for what we know respecting the intimate connection between electricity and chemical change.

Agricultural chemistry likewise owes much to Sir Humphry Davy. While Baron Liebig, of Darmstadt, was laboring in the same field in Germany, Davy was the first in England to teach how the growth of plants depends upon the chemical condition of the soil wherein they are sown, how different crops ought to be planted in succession in order not to exhaust the soil in any particular field, and what manure will best restore to the ground the elements that the crops have taken out of it. To Sir Humphry Davy, also, may be attributed in great part the knowledge of photography; for in 1802 he and Dr. Thomas Wedgwood suggested that pictures might be taken by the rays of the sun acting chemically upon chloride of silver, and they even succeeded in making some pictures in this way. Daguerre came afterwards and completed their work, when, in 1839, he taught us how to fix the pictures so that they would remain. Another contribution of Sir Humphry Davy to the cause of science resulted from his taking two pieces of ice and making them melt by rubbing them together, without any warmth being brought near them. In order to be quite sure that the heat did not come out of the air, he made a second experiment by placing a piece of ice under an air-pump. When he had drawn out all the air he set the machine to work, so that the ice, being rubbed, melted without any air being present. Hence he came to the conclusion that "heat is a peculiar motion, probably a vibration of the corpuscles of bodies, tending to separate them."

To an unwearied industry and zeal in research, Sir Humphry Davy added accurate reasoning. He was bold, ardent and enthusiastic; he commanded a wide horizon, and his keen vision pierced to its utmost boundary. He felt an intense admiration of the harmony, order, and beauty of the chemistry of nature; and he expressed his feeling in language that could flow from none but a mind of high powers and fine sensibilities. His discoveries were fruitful in further inventions after he had passed away. His cylindrical oil lamp alone, covered with its cylinder of wire gauze and flat gauze top, has been an invaluable boon to society. It has been followed by many improvements of which it was the parent, — by the "Geordie" of George Stephenson's safety-lamp, by that of Museler in Belgium, and by the ingenious contrivances of Bidder, Galloway, Benoit-Damus, Galibert, and Denayrouze. What are called the Bakerian Lectures were the field in which he brought forward many of his most brilliant discoveries. The lecture theatre of the Royal Institution in his day was as frequently crowded by eager and fashionable audiences, as in more recent times they were during the demonstrations of his gifted successor and early helper, Faraday.

In 1810 he was invited to Ireland, and received from Trinity College the honorary degree of LL.D. Two years afterwards, the Prince Regent at a levee at Carlton House conferred on him the honor of knighthood. Soon after this he gave up his lectureship at the Royal Institution and married. From this time he devoted himself to travel and literary composition. In 1820 he was elected President of the Royal Society; but though now at the head of science in England, he did not cease to act as a private soldier in her ranks. His Bakerian lecture of 1826, on the relations of electrical changes, obtained for him the society's royal medal. That year, however, his health began to fail, and he was obliged to go to Italy to recruit. He once more returned to England, but was again obliged to seek rest abroad. After spending some time in Austria he went to Rome, where he became seriously ill. He desired to be removed to Geneva, but he arrived too late. On May 29, 1829, he died amid the splendors of natural scenery by the lake; and his mortal remains were laid in a cemetery outside the walls of the city. The spot seemed very suitable as the resting-place of one who explored with enthusiasm the mysteries of nature, but dwelt also with intense pleasure on the marvellous loveliness and phenomena of daily occurrence.

MICHAEL FARADAY.

[Born 1791. Died 1867.]

SOME time during the year 1813, — that is, about two years before the battle of Waterloo, — a letter was received by Sir Humphry Davy, the celebrated Professor of Chemistry at the Royal Institution, from a young man, who spoke of himself as engaged in trade, which he detested, and anxious to pursue

MICHAEL FARADAY.

science, which he loved. Accompanying the letter were copious notes of Sir Humphry's lectures, showing that the writer was really in earnest in wishing to engage in the pursuit of science. At that time the great chemist was in the habit of frequently calling, on his way to the London Institution, at the house of a Mr. Pepys, one of the founders of that excellent school of science and literature. On one of the accustomed visits the letter was shown to Mr. Pepys, with the information that it came from a young man of the name of Faraday. "He has been attending my lectures," added Davy, "and wants me to give him employment at the Royal Institution. What can I do?" "Do?" replied Pepys; "put him to wash bottles. If he is good for anything, he will do it directly; if he refuses, he is good for nothing." "No, no," rejoined Davy; "we must try him with something better than that." And the warm-hearted Cornishman, as generous as he was gifted, wrote at once to the young man, and shortly afterwards engaged him as assistant in the laboratory. In the books of the Institution, under date of the 18th March, 1813, is the following entry: "Resolved, — That Michael Faraday be engaged to fill the situation lately occupied by Mr. Payne, on the same terms." The terms were 25*s*. a week.

Thus began the scientific career of the greatest experimental philosopher of modern times. He was the son of a journeyman blacksmith, and was born at Newington Butts on the 22d of September, 1791. At thirteen years of age he was apprenticed to a bookbinder in Blandford Street, Manchester Square, and spent eight years in what we must conclude was not altogether a cordial endeavor to become a binder of books. "I was formerly a bookseller and binder," he says in a letter to a valued friend, "but am now turned philosopher, which happened thus: While an apprentice, I, for amusement, learnt a little chemistry and other parts of philosophy, and felt an eager desire to proceed in that way further. After being a journeyman for six months under a disagreeable master, I gave up my business, and, through the interest of a Sir H. Davy, filled the situation of chemical assistant to the Royal Institution of Great Britain, in which office I now remain, and where I am constantly employed in observing the works of Nature, and tracing the manner in which she directs the order and arrangement of the world." In another letter he speaks of having learnt from the books which came under his hands for binding the beginnings of his philosophy. Two that were especially helpful to him were the "Encyclopædia Britannica" and Mrs. Marcet's "Conversations on Chemistry."

Like all who possess the highest type of mind, he was especially gifted with a poetic — that is, a creative — imagination. He could, he says, believe as easily in the "Arabian Nights" as in the "Encyclopædia." But his habit of rigidly cross-examining facts saved him from being carried away by mere fancies. He began by subjecting the statements in Mrs. Marcet's book to the test of what he calls "little experiments." Finding them to be true to fact, so far as he was capable of testing their veracity, he was encouraged to go on, always in the same way, however, of experimenting in the simplest manner and with the most unpretentious instruments. Some of his apparatus, even when he had command of the most elaborate appliances, were absolutely astonishing in their simplicity. In fact, one of the distinguishing traits of a successful experimentist is the art of contriving, and this art Faraday possessed to perfection. Once being anxious to carry home a flower without allowing it to fade, and having no bouquet-holder at hand, he asked for a cork, and, taking a piece of letter-paper, tied it round the cork in the form of a tube, put in water and the flower, and thus bore it safely away.

On his returning from the continental journey which he took with Sir Humphry Davy, and at the age of twenty-four, Faraday gave his first public lecture "On the Properties of Matter." For five years after this he went on quietly with his duties at the Institution. In 1820, being then in his thirtieth year, he published his first paper in the "Philosophical Transactions," consisting of researches into certain new compounds of carbon and chlorine, etc.

To enable him, on his marriage in 1821, to continue his residence at the Royal Institution, the managers allowed him additional rooms. And here Mr. and Mrs. Faraday lived for many years. Although without any children of his own, his fondness for children was shown particularly in those ever-memorable Christmas lectures at the Royal Institution. On those occasions the enthusiasm of the lecturer spread among the audience until the excitement of the happy throng was almost uncontrollable. Those who were present will never forget their delight when he showed them for the first time the decomposition of water into its constituent gases. Nor will they forget either what he told them so clearly and so pleasantly about the philosophy of combustion in his memorable lectures on the chemistry of a candle. Nowadays, in the presence of the telephone and the phonograph, we are so accustomed to scientific marvels that we scarcely wonder at anything; but in those days it was different. Electricity was then, like the rest of us, in its childhood. Its developments proved it to be a giant, so to speak, among physical forces; not only children, but grown-up people, were amazed at its performances.

For a few years after his marriage Faraday was much employed in chemical analysis.

In 1825 he published a paper in the "Philosophical Transactions," in which he announced the discovery of "benzole" and other hydrocarbons. This oil, called also "benzine" by Mitscherlich, was obtained by Faraday from among the oils condensed from oil gas at a pressure of thirty atmospheres. It can also be obtained from the benzoic acid, which is in turn made from gum benzoin, a sort of resin which comes from Sumatra. The importance of benzole is that it led to the discovery of a series of allied substances, one of which is aniline, the base of several beautiful coloring matters. The manufacture of aniline dyes is now quite a notable branch of industry.

Faraday's readiness in contriving apparatus has been alluded to. Another quality, or rather combination of qualities, was the quick intuitive glance which recognized a truth before the proof is complete, side by side with the philosophic caution which will only accept a fact after the demonstration has been fully worked out. He never built on the experiments of others until he had gone over them himself; and it frequently happened that during this very process ideas flashed upon his mind which had not occurred to the former experimenter, and which led to combinations or developments of the most important kind.

In the course of his chemical researches he had shown that the old-fashioned distinction of bodies into solids, liquids, and gases was merely a distinction of temperature and not an essential quality of the things themselves. So, in electricity, he soon showed clearly that the old distinction between electricity and magnetism was rather in the *modus operandi* than in the forces themselves; at any rate, that there was an intimate connection between them. Hence the modern development of electro-magnetism. While carrying on experiments on magnets with various metals, Faraday discovered a very remarkable property in the metal bismuth. It is well known that when steel, iron, platinum, and crown-glass are magnetized or electrized, if nicely balanced they will place themselves in the line of the electric or magnetic current, pointing out its direction. Hence the use of the mariner's compass. But bismuth was found to place itself *across* the current. Other substances, such as gold, silver, copper, lead, tin, sulphur, etc., which were known not to be affected in the same way as iron by the magnet, were found, like bismuth, to place themselves across the current. To this quality Faraday gave the name of dia-magnetism; the other quality of lying along the current he called para-magnetism. He even succeeded in magnetizing oxygen gas, and, in his own opinion, was equally successful in magnetizing, or at least in deflecting, a ray of light.[1]

It was his fondness for physics that led Faraday to abandon his lucrative employment as a public analyst. After ten years of married life, from the very beginning of which he had openly professed the simple but earnest Christianity taught him by his parents, he began to ask himself what was to be the real purpose of his life. Was it to be money-making or was it to be philosophy? His very nature recoiled from the idea of the former. He would always be able to support himself honorably; why should he aim at wealth? He accordingly gave it up, and devoted himself entirely to independent research.

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[1] The latter experiment has since been repeatedly exhibited. Professor Crookes showed it in a most satisfactory manner during the meeting of the British Association at Sheffield.

Thus his place is among the noblest of public benefactors, not in the sense of assisting in great philanthropic movements, but in his contributions to the sum of human knowledge. He lived to question Nature, to make her yield her secrets. He made her confess that the old-world distinctions of scientific phraseology were no distinctions at all. He overturned the old-fashioned jargons about the boundaries of science, about "fixed air" and "poles" and "caloric," and demonstrated that what had hitherto been called the forces of nature were in reality various modes of "force." In fact, he went very near showing that force was only another name for Nature herself.

The correlation of the physical forces is now an established principle of scientific knowledge. Tyndall, Joule, Grove, Mayer, Crookes, and many others, are going forward in the van of the movement which is enlarging the "boundaries of science." Others had opened or battered down gates, but it was Faraday who overthrew the time-honored walls of the old fortress of ignorance formerly called Philosophy.

In his early days scientific investigators seemed to dwell in various regions rigidly kept apart. Mechanics, physics, chemistry, were studied separately, as if the realms of Nature were a triarchy of distinct governments, each having its own peculiar code of laws, its language, and its customs. Faraday abolished all this. He taught by experiment and proved by demonstrable facts that variety exists only in the outcome of natural events, — that the soul, the inmost moving force, is unity. Such was the lofty ideal which Faraday set up in place of the old idols.

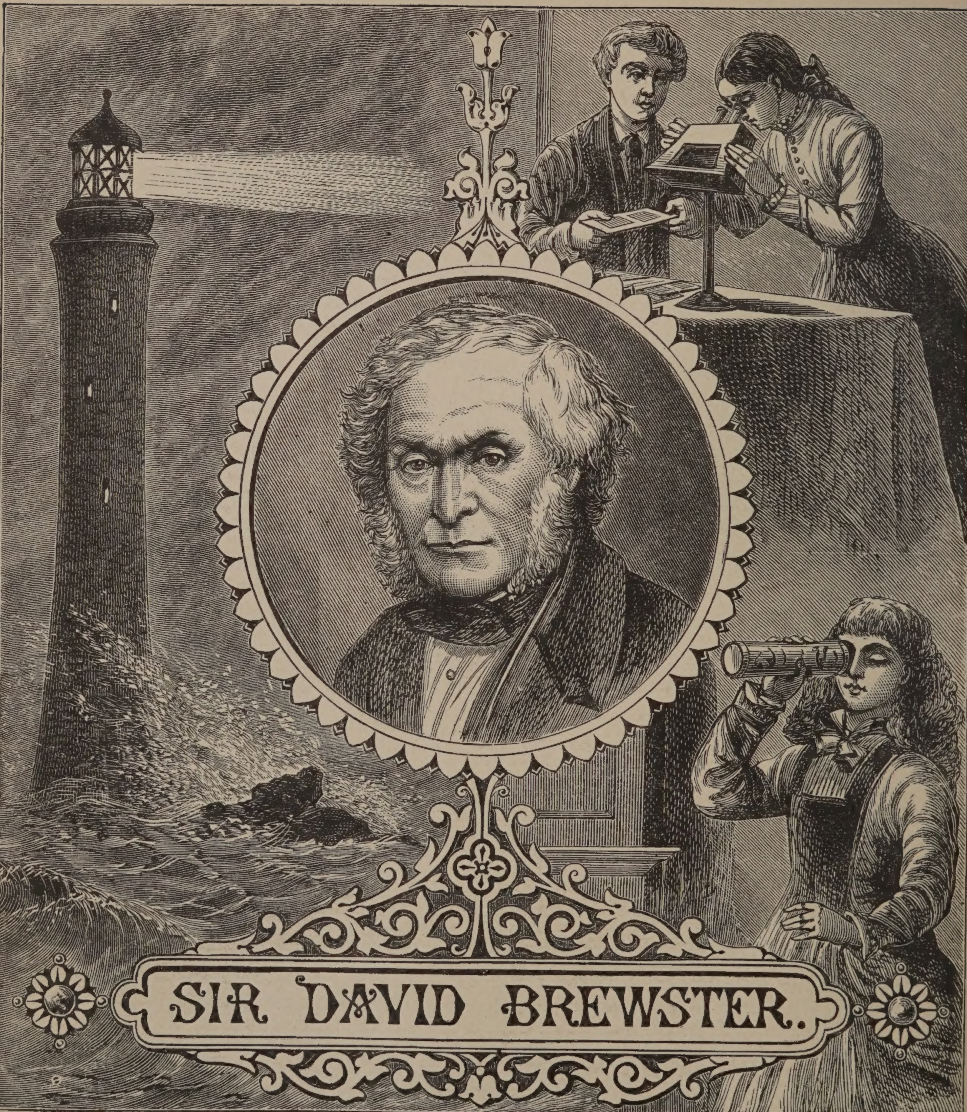
We have in this rapid glance seen something of the character of the philosopher. We will conclude with a brief notice of the man. He belonged to a body of Christians among whom he officiated as an elder in the church, and took his turn among others in preaching. His sermons were of the plainest kind, entirely destitute of that bold speculative spirit which characterized his lectures on science; for it was his belief that the heart is swayed by a power to which logic and science bear no relation.

By degrees his wonderful memory faded, and his health broke down, though not suddenly or painfully. He never quite got over the illness he had in 1865. He then gave up work entirely and forever. With the passing of the silent hours his life quietly ebbed away on the 25th of August, 1867.

Not the least useful lesson in the life of this upright, noble-minded, and lovable man was the perfect union of the sweet domestic virtues with the mighty faculties of a transcendent intellect. It gives honor to the claims of a homely life beside the demands of what are called the higher faculties, and goes far to break down the jealous partitions which less perfect natures have striven to put up between homeliness and intellect.

Other lessons of his life are perhaps equally striking, each to the individual reader. With his scientific and philosophical discoveries the world is mainly familiar. The benefits to mankind which have arisen and shall still arise out of his researches are numberless. But his character as a man has not been without its weight. It has left its mark upon those who knew him, as they all testify. And notwithstanding some failures, so fully were the noblest qualities united in him, that Nature, into whose innermost heart he delved the deepest, —

> " Nature might stand up,
> And say to all the world, 'This was a man.' "


SIR DAVID BREWSTER.

SIR DAVID BREWSTER.

SIR DAVID BREWSTER.

[Born 1781. Died 1868.]

SIR DAVID BREWSTER'S claim to distinction rests chiefly on his course of original discovery in the science of optics. This throws an interest over his whole life. As a child he enjoyed great advantages, his father being a teacher of high repute and rector of the grammar school at Jedburgh. In his boyhood the bias nature had given him for physical pursuits was fostered by his intimacy with a self-taught mathematician, astronomer, and philosopher, James Veitch, of Inchbonny. This neighbor enjoyed much local fame, and was particularly skilful in making telescopes. His university career began at the early age of twelve, when he was sent to Edinburgh and destined for the clerical profession. He finished his theological course and was even licensed to preach; but nervousness and a decided preference for scientific pursuits prevented him from entering on active service in the kirk. Brougham, his fellow-student, induced him to study the inflection of light, and this was the beginning of his optical researches. His name must be especially honored by every class of the great public, because his labors had so immediate and important a bearing on social requirements. Honors poured in upon him rapidly from his own country and France in consequence of his inquiries respecting (1) The laws of polarization of light by reflection and refraction; (2) The discovery of the polarizing structure induced by heat and pressure; (3) The discovery of crystals with two axes of double refraction; (4) The laws of metallic reflection; and (5) Experiments on the absorption of light. Those who were best qualified to estimate the value of his discoveries were not slow to acknowledge them; and the principal were the discovery of the connection between the refractive index of the polarizing angle, that of biaxal crystals, and of the production of double refraction by irregular heat. The non-scientific public highly appreciated his invention, in 1816, of the kaleidoscope, — a toy equally elegant and philosophical, for which there was for some time so large a demand in England and America that the supply could not keep pace with it. He did not actually invent the stereoscope, which is due to Wheatstone, but he so improved it by suggesting the use of lenses to unite the dissimilar pictures, that the lenticular stereoscope, now exclusively in use, may be said to have had him for its inventor.

But the optical researches of Brewster had a far more important result in the vast improvement of lighthouse apparatus. Fresnel was laboring at the same time with himself for the like object in France, and was the first to put the improvements contemplated into operation. But it is certain that Brewster described the dioptric contrivance in 1812, and pressed its use on those in authority in 1820. It was finally introduced into English lighthouses by his earnest efforts; and his memory justly deserves the tribute paid to it by his successor as head of the University of Edinburgh, who said, "Every lighthouse that burns round the shore of the British Empire is a shining witness to the usefulness of Brewster's life." It was not, however, till 1827 that he published his "New System of Illumination for Lighthouses," and offered his services to the lighthouse boards of the United Kingdom. Then, in 1833, experiments made in Scotland from Calton Hill to Gulan Hill, a distance of 12½ miles, proved that "one polyzonal lens, with an argand burner of four concentric circles, gave a light equal to nine parabolic reflectors, each carrying a single argand burner." From that time the illumination of lighthouses has been steadily advancing. Colored lights are now often used, but they require more distinction. In the new Lizard lights the magneto-electric light is that of Faraday, the machine is designed by Professor Holmes, and they are worked by Ericson's caloric engines.

Brewster displayed marvellous activity as a literary man, particularly in scientific literature. At the age of twenty he became editor of the "Edinburgh Magazine," and in 1808 of the "Edinburgh Encyclopædia." He contributed largely to the "Encyclopædia Britannica." He edited, with Jameson, the "Edinburgh Journal of Science," contributed seventy-five articles to the "North British Review," and wrote for the Transactions of various learned societies between three and four hundred papers. His "Life of Newton" occupied him twenty years. His interesting "Letters on Natural Magic," addressed to Sir Walter Scott, and his "Martyrs of Science; or, Lives of Galileo, Tycho Brahe, and Kepler," were widely read and highly valued by the public. He, with Herschel and Babbage, was foremost in establishing the British Association for the Advancement of Science, of which the first meeting was held in York in 1831. He was elected President of the British Association in 1849, and was chosen one of the eight foreign associates of the Institute of France in succession to Berzelius.

Sir David Brewster's speculations concerning the plurality of worlds are familiar to the reading public in consequence of his having supported and extended the already popular views of Dr. Chalmers on the same subject, and also through his having been opposed by Dr. Whewell, the late Master of Trinity College, and recently by Mr. Proctor. Sir David's work was entitled "More Worlds than One; or, The Creed of the Philosopher and the Hope of the Christian." In this volume he combated with great force and equal ardor the narrow and degrading notion of Dr. Whewell, that the innumerable suns which we call stars, with their planetary systems, are all rude and chaotic masses, devoid of mental and moral life. He believed, rather, and maintained the high probability of each being a centre of humanity, or of life analogous with that of human life. To the Christian this idea will commend itself all the more because he is taught to believe that even the unseen world around him (and much more the visible universe) is teeming with intelligences of various orders. The arguments, it may be added, of Sir John Herschel in his "Outlines of Astronomy," and of Professor Miller in his "Romance of Astronomy," corroborate those of Sir David Brewster, and lead to the conclusion that wherever there are worlds there is, has been, or will be, life varying in its forms and manifestations according to the various circumstances in which it is engendered and sustained.

The bent of his genius, according to the last edition of the "Encyclopædia Britannica," was not specially mathematical. In this respect he differed from Sir Isaac Newton, on whose life and manuscripts he dwelt so long and lovingly. He took the greatest pains to observe accurately and to classify facts, but he was not much given to theorizing. Some of the laws which he established, and which have been already referred to, were of prime importance, but they were generally the result of repeated experiments. He did not contribute much towards the ultimate explanation of the phenomena which he passed under review; and it may be mentioned that although he did not absolutely maintain the corpuscular theory to the end of his days, he did not, on the other hand, adopt explicitly the undulatory theory of light. But, in saying this, it is not meant to detract from his genius, but to point out one of its characteristics. "His scientific glory," said Professor Forbes (and few will be inclined to dissent from the verdict), "is different in kind from that of Young and Fresnel; but the discoverer of the law of polarization, of biaxal crystals, of optical mineralogy, and of double refraction by compression, will always occupy a foremost rank in the intellectual history of the age." It was a small distinction for him to receive the honor of knighthood, as he did in 1831, and the decoration of the Guelphic order of Hanover. It was the talent he displayed in his discoveries and numerous scientific essays that really ennobled him. In 1838 his merits were recognized and rewarded in his appointment to be principal of the colleges of St. Salvator and St. Leonard, St. Andrews, and still more when, in 1859, he consented to be the head of the University of Edinburgh, and continued to discharge its duties diligently till within a few months of his death in 1868.

SIR ROWLAND HILL.

SIR ROWLAND HILL.

[Born 1795. Died 1879.]

THERE is, perhaps, no department of social progress which has made more rapid and decided headway than that which belongs to the art of travel and the conveyance of messages. The ease and luxury of a modern railway journey seem to have thrown back the formidable discomforts of the old stage-coach into remote antiquity. Yet it is less than a century since old travellers would make their wills before they journeyed from London to York, and nerved themselves to the undertaking as men who had to face a week of untold peril. Peril surrounded them from beginning to end, — peril from coachmen too ready to accept the proffered glass, — peril by stress of weather, storm, and snowdrift, — and last, though by no means least, peril from highway robbers. At any moment of the still and ghostly night a glittering weapon might flash through the frail window, and the once famous formula, "Your money or your life," ring in the drowsy ears of the half-conscious traveller. In 1779 the Chester mail was robbed in the City Road. Now and then, in the darkness and confusion, a passenger would get tied neck and heels, and pitched into the basket in mistake for the robber. Of course robbery was comparatively easy when the average speed of travelling in England was under five miles an hour, and in the case of the letter post three miles and a half. A coach that left London for Bath in the afternoon was looked upon as a "highflyer" if it reached its destination by the following morning. Before 1784, when Mr. Palmer, of the Bristol Theatre, introduced the mail-coach system, the manner and means, and of course the pace, of locomotion were most incredibly slow.

Mediæval illuminations represent Apollo — of course in contemporary costume — leisurely climbing the celestial heights in a good solidly built "plaustrum," drawn by a team of most deliberate heavy-heeled dobbins; no doubt representing the mediæval idea of a gentlemanlike pace. In downright seriousness it was the pace with which our forefathers were calmly content. And not only so, but some of them violently protested against its increase. So late as 1797, when Mr. Palmer proposed further improvements on his system with regard to the rate of travelling, a Mr. Hodgson, one of the post-office authorities, opposed the alteration as worthless because founded on an impossibility. The "impossibility" consisted in supposing that the Bath letters could be brought to London in sixteen or eighteen hours. Mr. Palmer's plan, however, was adopted; and the result was that five hundred places obtained a daily delivery which before had only had one three times a week. For twenty years previously the revenue from the postal system had averaged £150,000 a year. In ten years it increased to £400,000. In ten years more it reached £700,000, and in twenty years more, £1,500,000. Whoever would like to consult the history of this movement will find it in the Parliamentary Papers for 1807–8 and 1813. In 1838 a plan calculated not only further to increase the utility of this branch of the public service, but to revolutionize the whole management, was privately submitted to the Government and afterwards published as a pamphlet. This production — an ingenious, profound, and convincing argument — was the work of the truly world-wide benefactor, Rowland Hill, who was then forty-two years of age, and had been employed for almost the whole of his life, from a mere lad, in the business of a schoolmaster.

He was born on December 3, 1795, at Kidderminster, "quite unexpectedly," says his biographer, his birth being premature. He was the third son of Mr. Thomas Hill, afterwards a noted schoolmaster in Birmingham. From the extreme delicacy of his health as an infant, it was only by the devoted and constant attention of his mother that the child's life was prolonged. Sir Isaac Newton was another instance of a life begun thus prematurely, yet extended beyond the usual length.

Rowland Hill's earliest amusement was counting up figures aloud as he lay on his couch beside the fire, until he had reached a total of hundreds of thousands. Thus early did he show his natural aptitude for computation. As his strength increased he was able to attend his father's school, where he made extraordinary progress, particularly in mathematics. At quite an early age he assisted in teaching these subjects both in his father's school and elsewhere.

During the next ten years Hill gave occasional lectures at the Philosophical Institution in Birmingham, usually on subjects connected with science or mathematics. One of his discourses was on the "Advantage of Systematic Arrangement," and his own character was an illustration of the value of what he taught. He enforced the love of order and method upon all his pupils until the practice of these valuable qualities became a second nature.

The school of the elder Hill at Hazlewood, in the Hagley Road, Birmingham, was famous throughout England; and it fully deserved its reputation, for it was conducted on the noblest and soundest principles. One rule was never to use corporal punishment, — a practice then common in schools of every class. In place of it a system of self-government, superintended by the masters, was found to be perfectly efficient and satisfactory. Father and sons worked together with the most perfect cordiality and unanimity, and the result in twenty years was an establishment consisting of more than two hundred persons.

In 1827 Rowland removed to Bruce Castle, Tottenham, having in that year married the daughter of Mr. Pearson, of Graisley, near Wolverhampton. She was a lady whose tastes were precisely such as enabled her to be a most valuable assistant to her husband. Throughout his various wearisome investigations she steadily worked as his amanuensis, analyzing and compiling statistics, and writing early and late from his dictation.

In 1833 he retired from the school on account of broken health, and passed some months on the Continent. The next year we find him in England as the secretary of the new Colonial Exploration Association. The power of organization formerly shown in the successful management of a large school, now proved itself equal to the rapid development of the association. In 1836 a colonial government was established, and in 1841 a policy inaugurated that laid the foundation of the future prosperity of the colony.

We now arrive at that period in the life of this gigantic worker, this genius, — if genius, as is said by some, means a tremendous capacity for hard work, — when to do him justice we should require a volume, and not the few brief lines we have now at our disposal. The deficiencies of the old postal system have already been glanced at, but it would be sufficiently near the truth to say that the so-called system was simply a mass of anomaly and mismanagement. Delay in transmission of letters was one of its smallest inconveniences. The rates charged for postage were enormous. Double letters, — that is, two sheets of paper, — however thin or however weighty, were charged double postage. The charge from London to Birmingham was ninepence. Stamps and envelopes were of course as yet unknown. The smallest note from a distant part of the country was charged 1*s.* 6*d.* and upwards, a packet from Edinburgh to London costing three times as much as would now be charged for a substantial letter to the Antipodes.

One thing that added greatly to the burden of these charges was the usage of society. It was considered to be against good taste to prepay a letter, so that it was within the means of any one to victimize the person whom he selected as his correspondent. Many a poor cottager had to go without a meal to pay for a letter which he dare not refuse, lest it should contain news of vital importance to him. Many people avoided the pressure of the postage tax by availing themselves of what were called "franks." "Franks" were the signatures of members of Parliament, which being placed on the front of a letter made it post free. Of course this prerogative of Parliament rendered its exercise anything but a sinecure. Members were pestered for signatures. Nobody thought it mean to beg for franks, and it is even affirmed that certain members made money of their privilege by selling their autographs at so much a dozen. All that was necessary was to write the name on a sheet of paper in such a way that when folded for transmission it should appear beside the address. Before the custom finally disappeared, however, the law insisted that the whole address should be in the franker's handwriting and the date subjoined. But besides this mode of evading payment there were numerous others. The contraband trade was enormous. All kinds of means were made use of to evade the law. Parcels of letters were sent by coach. Drivers, guards, carriers, pedestrians, carried their pockets stuffed with them. In some places not more than one letter in fifty passed through the post-office. In short, public morality on the question of postages was thoroughly unsound.

Such was the state of things when the pamphlet on "Post-Office Reform, its Importance and Practicability" made its appearance. The main features of the plan were: (1) A great diminution in the rates of postage; (2) Increased speed in the delivery of letters; and (3) More frequent opportunity for their despatch.

Mr. Hill proposed that the rate of postage should be *uniform*, and charged *according to weight*, and that payment should be made *in advance*. The means of doing so by stamps was not suggested in the first edition of the pamphlet, and Mr. Hill said the idea did not originate with him. In a later issue the matter is thus referred to: "Perhaps the difficulties might be obviated by using a bit of paper just large enough to bear the stamp, and covered at the back with a glutinous wash, which by applying a little moisture might be attached to the back of the letter."

The justice and feasibility of a uniform rate rested on the fact which Mr. Hill made out from his inquiry, that the actual cost of conveying letters from London to Edinburgh, when divided among the letters carried, did not exceed one penny for thirty-six letters; that is, taking the average weight of a letter at a quarter of an ounce, the cost of its transmission was not more than *the ninth part of a farthing*. And the post-office charged 1*s*. 6*d*., and yet could not make it pay!

The scheme startled not merely the officials but the public generally. Yet the more it was looked into, the more practicable it became. Five petitions in its favor reached Parliament in the very year it was propounded. In 1838 more than three hundred found their way to the Legislature. In the following year two thousand petitions were presented to both Houses. The Duke of Richmond, ex-Postmaster-General, advised the adoption of the plan, and the Chancellor of the Exchequer provided a bill to enable the Treasury to put it into execution. In September, 1839, Mr. Hill was made superintendent to carry his system into effect. On the 5th of December, as a preparatory measure to accustom the department to the mode of charging by weight, the inland rates were reduced to a uniform charge of 4*d.* per half-ounce, and a scale was based on the half-ounce, ascending to sixteen ounces. No long trial was necessary. The temporary measure only lasted about one month. On the 10th of January, 1840, a uniform rate of 1*d.* per half-ounce was adopted, and the system with which the name of Rowland Hill is evermore associated became a matter of history.

Penny postage is of course the great boon for which the name of benefactor is added to that of the inventor. But his beneficial services do not end with this great work. The present money-order system was also his suggestion; and many minor improvements of both departments, adding greatly to the efficiency of the service, emanated from his fertile and creative brain. In 1839 the whole amount of money-orders was only £313,000. In 1863 the amount was £16,493,793.

The honor of knighthood, £33,360 in public gifts, a pension of £2,000 a year, and a statue in Birmingham were among the recognitions of the vast benefits which his great and self-denying labors had conferred upon the community. But his services were more than even national. The whole civilized world has benefited by his inventions and suggestions. His fame, therefore, rests with the world at large. "And though men," says the "Edinburgh Review,"[1] "who have risked their

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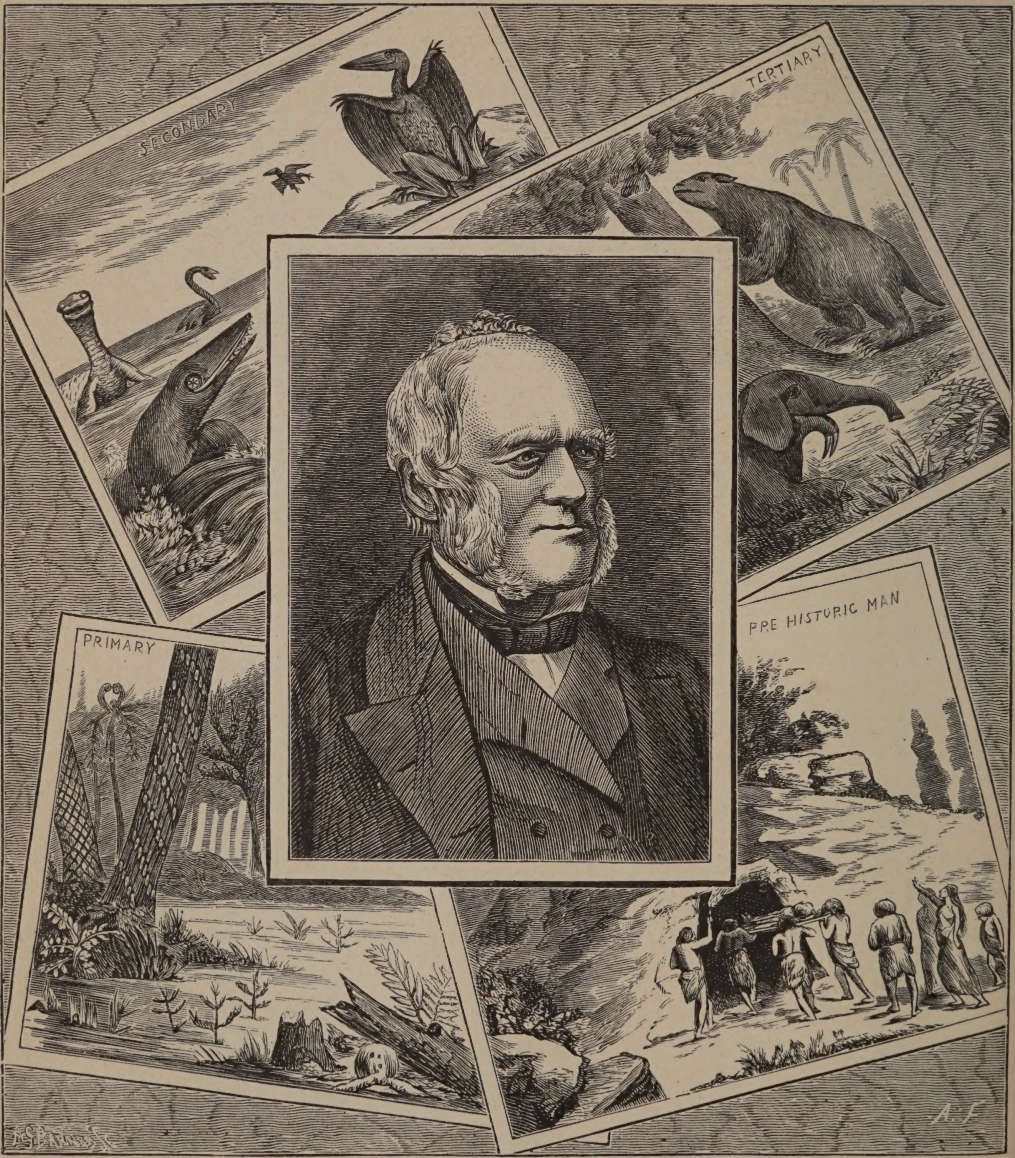
[1] Vol. cxx. p. 93.



SIR CHARLES LYELL.

lives on fields of battle, or borne the whole burden of public affairs, may have claims to more stately rewards, we know of no man who has conferred a greater amount of practical benefit upon his fellow-creatures than the unassuming author of 'Postage Reform.'" In 1863 Sir Rowland Hill was compelled through declining health to seek temporary repose. The following year he resigned his office entirely; and so completely did he withdraw from public life that by many persons he was supposed to have died years ago. But he still quietly lived on in his home at Hampstead. The latest of the many personal honors that his grateful countrymen were only too anxious to press upon him was the freedom of the City of London. In August, 1879, his infirmity, which had long rendered him unable to support an ordinary conversation, increased so rapidly as to convince himself and his family that his end was near. It came on the 27th, when he died quite peacefully, as it were weary and worn out with his long life of service. On September 4, at noon, he was buried in Westminster Abbey.

SIR CHARLES LYELL.

[BORN 1797. DIED 1875.]

CHARLES LYELL was the eldest son of a botanist of more than a local reputation. His early education was received at Midhurst, in Sussex, from whence he passed to Exeter College, Oxford, taking his degree of B.A. in 1819, and that of M.A. in 1821. Here he had the opportunity of attending the lectures of Dr. Buckland, Professor of Geology, and thus acquired a taste for the science of which he afterwards became so conspicuous and distinguished a cultivator. He was, however, destined for the bar, and came to London to pursue the study of the law. He commenced practice as a barrister; but having an independent fortune he relinquished that profession and devoted himself to the study of geology, thus maturing the inclination which had been previously awakened and fostered by the above learned professor in his early college days, depriving the legal profession of an advocate of whose ability it is impossible to speculate, and giving to the world of science one of its greatest geologists.

In 1824 he travelled for scientific purposes in Switzerland, France, Germany, and Italy. His earliest geological papers were contributed in the following year to the "Transactions" of the newly founded Geological Society, of which he was one of the first members, and to the "Edinburgh Journal of Science;" and from the commencement until a late period of his life, he enriched the "Transactions" with his valuable contributions. One of the earliest papers was published in the second volume of those "Transactions," and was entitled "On a Recent Formation of Fresh-Water Limestone in Forfarshire, and on some Recent Deposits of Fresh-Water Marl; with a Comparison of Recent with Ancient Fresh-Water Formations."

Many similar works appeared in "Geological Transactions," and in this year he also wrote an article in the "Quarterly Review," on "Scrope's Geology of Central France." These papers all indicated powers of observation and comparison of a high order, and prepared the geological world for the appearance of the work on which, above all others, the reputation of Sir Charles Lyell mainly rests. How profound and fruitful his studies and speculations must have been during this period, when he gave to the world his "Principles of Geology," — the first volume in 1830, the second in 1833! Such, however, was the impression produced by this work, that second editions of the first and second volumes were required before the third volume appeared. A third edition of the whole work of four volumes appeared in May, 1834, a fourth edition in 1835, and a fifth in 1837.

This book marks an epoch in the progress of the science. Lyell's aim was to establish principles, to lay a solid and philosophical basis for the science; and this by showing that a true and sufficient explanation of the phenomena of the past is furnished by the belief in the uniform action of forces now in operation. This view, which had been set forth by Hutton, has been called Uniformitarianism, and stands opposed to the then prevailing doctrine of Catastrophism. For some time it had to pass through the usual ordeal of theological alarm and denunciation, but has now long been accepted and taken its place as part of the general inheritance of knowledge. The work was in 1838 separated into two parts; the portion relating to the ancient history of the earth being published by itself, under the title of "Elements of Geology." This title was changed in 1851 into "Manual of Elementary Geology," but the original title was restored to the sixth edition published in 1865. Of the "Principles," *eleven* editions appeared during the author's lifetime, and a twelfth was in preparation when he died. Both works have been translated into several European languages.

The author's account in his ninth edition of the "Principles," to use his own language, "treats of such portions of the economy of existing nature, animate and inanimate, as are illustrative of geology, so as to comprise an investigation of the permanent effects of causes now in action, which may serve as records to after ages of the present condition of the globe and its inhabitants. Such effects are the enduring monuments of the ever-varying state of the physical geography of the globe, — the lasting signs of its destruction and renovation, and the memorials of the equally fluctuating condition of the organic world. They may be regarded as a symbolical language in which the earth's autobiography is written. In the manual of 'Elementary Geology,' on the other hand, I have treated briefly of the component materials of the earth's crust, their arrangement and relative position, and their organic contents, which, when deciphered by aid of the key supplied by the study of the modern changes above alluded to, reveal to us the annals of a grand succession of past events, — a series of revolutions which the solid exterior of the globe and its living inhabitants have experienced in times antecedent to the creation of man." It was undoubtedly the "Principles" that called the attention of geologists to the necessity of regarding the past changes of the earth's surface as resulting from causes now in operation. It met, however, with great opposition from those who imagined that it interfered with the authoritative declaration of Scripture. Sir Charles Lyell's own university was most decided in its opposition to the new views, although its able professor of geology was not so. His view is acknowledged as consistent with a philosophical pursuit of geological science.

From a very early period in the history of human intelligence a notion has been entertained that the various forms of animals and plants which inhabit or have inhabited the surface of the earth are modifications of one common form, and that the more complicated have grown out of or been developed from the simpler forms of animal and vegetable life. Sir Charles Lyell opposed this view, and denied that in the history of the strata there is any evidence that the lowest forms of animals were created first. The only fact he admits favoring the hypothesis of development is the late appearance of man on the surface of the earth. Regarding negative evidence as no support to any theory of progress, he sees no reasonable objection to the anticipation that the highest forms of mammalia, except man, should be found in the lowest Silurian rocks. This is still occupying the minds of the most distinguished palæontologists of the present day.

Sir Charles Lyell twice visited the United States, and delivered courses of lectures before the scientific institutions of this country. His chief aim, however, was to examine the geology of the New World. His papers on this subject are very numerous and important, and were published in the "Proceedings and Transactions of the Geological Society."

In addition to these papers, Sir Charles published two works giving an account of his travels in America. The first appeared in 1841, and was entitled "Travels in North America," with geological observations on the United States, Canada, and Nova Scotia, two volumes, octavo, with a geological map.

These volumes contain an account of personal incident as well as popular descriptions of geological districts visited. In this volume he describes the educational institutions of America, and strongly insists on their superiority to our own similar institutions, on account of the extensive cultivation of the natural sciences. In his second journey he visited the Southern States, and records in his work his personal adventures, together with an account of the geology of the districts through which he passed. This work is entitled "A Second Visit to the United States," published in 1845.

Mr. Darwin's famous book on "The Origin of Species" having appeared in 1859, Sir Charles Lyell, then past sixty, gave a searching investigation to the new views of the very early existence of man upon the earth, and in his important work entitled "The Antiquity of Man" (1863), announced his full adhesion to them. They were also embodied in the next (tenth) edition of his "Principles." Besides these great works he contributed many scientific memoirs to the "Proceedings and Transactions of the Geological Society," the "Reports of the British Association," of which he was an active member and office-holder, and "Silliman's Journal of American Science."

The world gave him honors in abundance in recognition of his services to science. He received from her Majesty the honor of knighthood in 1848, and in 1853 had the gratification of having conferred on him the honorary degree of D.C.L. by his own university of Oxford. He was raised, in 1864, on the recommendation of the then Premier, Lord Palmerston, to a baronetcy, which became extinct by his decease. He was a deputy-lieutenant for his native county of Forfarshire. He was president of the British Association at the meeting at Bath in 1864, when he delivered an elaborate address on the antiquity of man.

Sir Charles married, in 1832, the eldest daughter of Mr. Leonard Horner. She died in 1873, leaving no children. Sir Charles died in London, February 22, 1875.

In compliance with a memorial signed by fellows of the

Royal Geological and Linnæan Societies, his remains were interred in Westminster Abbey. The funeral took place on the 27th, and was attended by the leading men of science and many persons of distinction.

HUGH MILLER.

[BORN 1802. DIED 1856.]

HUGH MILLER was emphatically a man of purpose. In his earliest boyhood he gave signs of that indomitable will which in later years was to lead him to success. His father, best known to us through Hugh's sketch of him in "Schools and Schoolmasters," was a sailor. Descended from a long line of seafaring men, the elder Hugh Miller was a man of the utmost regularity of temperament, opposing a serene front to misfortune, and enjoying in an equable fashion such pleasures as fell to his share.

Steadfast in resolution and aim, fearless in the interest of others, utterly forgetful of self in all the relations of life, he could not but bequeath a noble heritage to his son. From his mother's side Hugh Miller was to receive the passionate, imaginative, and emotional characteristics of the Highland Scots. Mrs. Miller was a firm believer in second sight; and when, after the death of her husband at sea, she devoted herself to the task of supporting her three children by her needle, her fancy found rich field for its exercise.

Her chief occupation was the making of shrouds; and when Hugh was between five and six years old she would draw his attention to the raps on her work-table, or the winding-sheet in her candle, as signs of another death to come in the neighborhood. Agitated and upset by her weird narratives, little Hugh would creep to his bed and hide his head under the clothes to

FISHES OF THE OLD RED SANDSTONE
PTERICHTHYS MILLERI
PTERICHTHYS
OSTEOLEPIS
A.F.

HUGH MILLER.

escape the monotonous click, click, of his mother's needle, or the recurrence of the ghostly visitants expected by her.

The eldest of the little family, Hugh was born at Cromarty, in the North of Scotland, upon the 10th of October, 1802. He was five years of age when his father died during a storm at sea; and in after life he constantly recurred to a vision which he deemed supernatural, and which appeared to him upon the eve of his father's loss.

After his father's death he owed h's education to his mother's brothers, who are known to us in his book as Uncle James and Uncle Sandy. Both must have been superior men. Living close at hand, they took charge of the two little girls, and proposed to devote their best consideration to Hugh's prospects. In accordance with their advice he was sent, at the age of six, to a dame school; and when he had discovered, to use his own words, that "the art of reading is the art of finding stories in books," his life became a joy to him. He spent all his spare time in devouring such books as came in his way, his prime favorites being the "Pilgrim's Progress" and Pope's "Homer."

A year later, Hugh was launched into the parish school, and found himself a unit among one hundred and twenty others. His school career reflects no credit upon him. He was set down by the masters as a dunce, not because he could not, but because he would not, learn in a regular way. His reading meanwhile bore fruit; he charmed his fellow-learners with tales drawn from history or imagination, and while his unlearned tasks elicited from his masters that he was a dullard, the lads who were his contemporaries recognized him to be far superior to them in imagination and intellect. In this estimate his uncles joined, and in spite of the master's denunciations held fast to their idea that he would one day prove himself worthy of their faith in him. His Uncle Sandy particularly, observing his interest in natural history, did all in his power to form his taste.

When he was twelve years old, an adventure to which he refers in more than one of his works befell him. Going with one of his schoolfellows, a lad younger than himself, to explore a cave on the shore, they were overtaken by the tide, and only after an interval of terrible anxiety were rescued by some fishermen. Somewhat later, a visit to his relations in the Highlands of Scotland increased his interest in nature, and he amused himself during his leisure hours in a somewhat original way. Drawing maps of the country in the sand, he arranged colored shells in the different compartments to represent inhabitants, and, as king of his imaginary realm, designed roads, canals, and harbors, proceeding to govern in accordance with the views he had gathered from books.

Returning to Cromarty to finish his school career, his favorite game consisted in heading a party of his schoolfellows and spending a day in exploring the caverns below the precipices of Cromarty. His school record continued disastrous. Apply himself he would not, and for weeks together he played truant. His little sisters died suddenly, and he overheard his mother regretting that it had not rather pleased God to take her boy. For a moment he was moved, but the impression soon faded away. He himself relates that at this time he was an atheist; and when after a final contest with the "dominie" he left school, it was with a reputation far from enviable.

In 1819 Mrs. Miller married again, and Hugh awoke to the perception that he must choose a career. From early boyhood he had indulged in writing, and a manuscript magazine named the "Village Observer" was carried on by him up to the February of the year following this event. In March, 1820, he was apprenticed to a stone-mason in the village, and a life little congenial to his tastes began. His master was his mother's brother-in-law, old David Wright, a character in his way, but with little sympathy for his imaginative nephew. The toil in the stone-mason's yard had a sobering effect upon Hugh's character; his strong will came into force. He determined, having chosen his career, to excel in it; and, after a few months' awkwardness, astonished his master and fellow-apprentices by becoming one of the most expert hewers in the village.

Recognized as an expert workman, Hugh Miller became attached to a regular squad of masons; and we find him pursuing his calling in various parts of the country, occupying his leisure in writing long letters to his friend William Ross, a painter's apprentice, whose genius was second only to his own.

Under the pressure of work unsuited to his nature Hugh Miller's health gave way, and it was a fortunate thing that the expiration of his apprenticeship on the 11th of November, 1822, allowed of his return home. He was now a journeyman; and his first work was a stone house, still in existence, built for an aunt whose means scarcely allowed of her paying rent. He had difficulty at first in obtaining employment, and in the interval wrote many poems, which he sent to his friend William Ross. Work, when at last it was offered, took him to the West of Ross-shire; but there an accident, in which his foot was crushed, for some weeks disabled him.

In 1823 he first visited Edinburgh, where he soon obtained employment, and remaining in the neighborhood at Niddrie he worked at his trade for two seasons, returning to Cromarty with health so impaired from the hardships of his life that he anticipated death. His lungs had been permanently injured by exposure and hard living, but his suffering could not quench his spirit. Letters and poems of this period of his life attest the increasing power of his genius, and that wonderful love of nature which was to assist in his later development. Religious difficulties met him as his intellectual culture ripened, and his letters to his friend tell of many a struggle and battle before he could write truly of a "change of heart that had brought him peace."

In 1825 Hugh Miller visited Inverness in search of work. In this quest he was unsuccessful; but forming during his visit the acquaintance of the editor of the "Inverness Courier" he was induced to allow some of his poems to be printed. In spite of the welcome his verses received, and the gratifying comments of the critics, Hugh himself decided that his poetic faculty was not worthy of further cultivation, and determined to devote himself to prose. In this year he lost by death his two uncles, who had stood to him in the relation of parents, and also his great friend William Ross.

In 1831 Hugh Miller met Miss Fraser, who afterwards became his wife. To her influence we are mainly indebted for his determination to devote all his leisure to prose works and to the investigation of scientific theories. Encouraged by her he proceeded with his first book. And anxious above all else to provide a fitting home for his promised wife, he sought employment which might raise him socially. He was offered a clerkship in a bank, and was soon temporarily established in the Commercial Bank at Linlithgow. While giving much of his attention to the details of a business which was essentially new to him, Hugh Miller completed and corrected the proofs of his first prose work, "Scenes and Legends in the North of Scotland." Its success was his introduction to society. He was now to be sought out and encouraged; and his prospects improving he was able, upon the 7th of January, 1837, to marry the lady he had so long loved.

The newly married couple settled in Cromarty, the wife adding something to their small income by taking pupils. The first sorrow that clouded their happiness was the death of a little daughter who was inexpressibly dear to her father. The headstone for her grave was chiselled by his hand, and was the last occasion of his practising his early handicraft.

Hugh Miller for a while threw himself ardently into literature, taking up the questions of the day with great earnestness, and advocating reforms in the leading newspapers; but the quiet years as they succeeded each other increased the attraction which science had ever possessed for him. His books had already attracted the attention of men of intellect, and a chapter in "Scenes and Legends" upon geological formations was the occasion of more than one letter from scientific men. In 1838 we find him in correspondence with Sir William Murchison and Mr. Agassiz as to the strata of the Old Red Sandstone, and from that time till his death his scientific researches were unwearying.

At this time the ecclesiastical questions which agitated Scotland aroused the deepest interest in Hugh Miller's mind, and in 1840 he settled in Edinburgh to undertake the editorship of the "Witness," a paper started on behalf of the Non-Intrusion party in the Church of Scotland. In this paper some of his first geological articles were published. They were afterwards collected under the title of "The Old Red Sandstone." Containing as they did an accurate account of his discoveries in palæontology, they aroused the attention not only of the literary world but of the entire public; and the enthusiasm which was already felt for his moral character as the champion of the National Church was increased by the fresh evidence of his genius which every number of his paper revealed.

The immense labor imposed upon Hugh Miller before the final disruption of the Church so seriously impaired his health that for a long time he was forced to give up all literary effort. When he resumed his pen it was once more to labor indefatigably in the interests of the Free Church, with which his name is inseparably connected.

In 1848 he visited England, and upon his return published his "First Impressions of England and her People." The good which Hugh Miller's works have done for the cause of science is inestimable; for his genius not only developed new truths, but overcame old errors and established, above all, the independence of science. "The Testimony of the Rocks," his last book, was an attempt to reconcile the truths of geology with the facts of the Creation as given in Genesis.

In 1850 Hugh Miller was elected secretary to the Geological Department of the British Association for the Advancement of Science, an office which he filled until his death.

When we reflect what an immense amount of work was crowded into those years of the great Scottish geologist's life, it is little surprising that serious symptoms of brain disease revealed themselves. Terrible visions haunted his highly strung mind; fear, unnatural and hideous, took possession of him, and under the terrible influence of a distraught fancy he imagined himself pursued by demons. In a moment of paroxysmal mania he died by his own hand during the night of December 23–24, 1856.

This sad ending could not spoil the nobility of a life devoted to the cause of humanity and science. In history Hugh Miller will be honored as the true gentleman; and in the annals of distinguished men few can be found more worthy a nation's esteem than the "Stone-mason of Cromarty."

SIR CHARLES WHEATSTONE.

[Born 1802. Died 1875.]

As several of the more brilliant and widely useful discoveries and inventions have been unappreciated by the general public for a long period after they were first notified to them, and as by far the greater portion of these scientific results have proved unremunerative to their authors for many years after they originated, it is very satisfactory to learn that the subject of this memoir was one of those fortunate individuals who not only gained many honors, but earned good if not excellent pecuniary reward for his splendid scientific labors within a reasonable time after they were completed.

This eminent physicist and inventor was born in 1802 at Gloucester, where his father was a music-seller. The son, having been brought up as a musical-instrument maker, set up business for himself in London in 1823. Possessing, however, a fertile inventive mind, and having made many important researches and experiments of a scientific character, he notified some valuable discoveries in his "New Experiments of Sound," which were published in that year. In 1832 he sent a paper to the Royal Society, "On the Acoustic Figures of Vibrating Surfaces," and was appointed, two years afterwards, Professor of Experimental Philosophy at King's College in London. At this establishment he completed his researches upon the velocity of electric transmission by means of revolving mirrors, an experimental system which has been used with great success by other persons in other branches of physical science. Wheatstone also pointed out the possibility of distinguishing metals according to the spectrum character of the electric spark passed between them; and an apparatus was invented

SIR CHARLES WHEATSTONE.

by him for the measurement of electrical resistance. He also invented the polar clock, for ascertaining the time by the position of the plane of polarization of the light of the polar sky, and the catoptric stereoscope.

But by far the greatest service he rendered for the good of mankind, and one for which he has attained a world-wide fame, is his practical application of the electric telegraph for public purposes; and this, it is claimed, Wheatstone, with the mechanical assistance of a Mr. Cooke, was the first to introduce for practical purposes.

Consequently, in May, 1837, they took out a patent in their joint names "for improvements in giving signals and sounding alarums in distant places by means of electric currents transmitted through metallic circuits." Other patents were afterwards obtained by them, either individually or in co-operation, for various improvements upon their first method; but the great principles of this remain unchanged, and form an essential part of nearly all the later telegraphic instruments of other inventors. Immediately after the date of their first patent, wires were laid down on the London and Northwestern Railway between Euston Square and Camden Town stations, a mile and a quarter apart, and messages were effectually sent between them. The first telegraph used for public purposes was fixed in 1838 on the London and Blackwall line. In the following year permission was given to use the apparatus on the Great Western Railway as far as West Drayton, which was only thirteen miles, and it was afterwards extended five miles beyond this to Slough. In these trials, as well as in the one on the London and Blackwall Railway, the wires were enclosed in iron tubes placed on the ground. Notwithstanding the successful experiments of the telegraph, the directors of the Great Western Railway were opposed to wires being placed between Paddington station and Bristol, while the general public, who were allowed to transmit messages by this instrument, availed themselves but little of the advantage for some years after it was first introduced. An event, however, occurred in 1845, which at once manifested its great utility and heightened its estimation wonderfully. In that year it was used to send a message to the London police to arrest Tawell on a charge of murder, who was travelling by an express train to escape being captured.

The Electric Telegraph Company purchased their earlier patents for £120,000, and their system was quickly extended over Europe by this and other rival companies; and shortly afterwards no railway was considered complete without a good supply of telegraph wires. It is now considered indispensable that every important city and town shall be provided with means of telegraphic communication with other cities and towns, and that the wires shall be laid down on all new trunk and branch lines. The charge for the transmission of intelligence has also been considerably reduced, and messages are sent on an immense variety of subjects. It is interesting to know that, according to returns published in 1879, the entire length of telegraphic lines over the globe was then no less than 431,761 miles, which are divided among the several continents as follows: namely, Africa, 7,999; America, 127,980; Asia, 24,760; Australasia, 36,692; Europe, 234,330 miles. The total length of wireage is about three times this length. It was also estimated that there were about 230,089 miles of cable laid down. But even these figures have been enormously increased.

Frequent controversies have arisen as to who should rightly be considered the first contriver of the electric telegraph for popular use. Two names have been prominently mentioned to dispute Wheatstone's claim to this distinction; namely, Steinheil, of Munich, and Morse, of New York. It appears, according to a statement of M. Arago to the French Academy of Sciences, that the telegraph of the former was in use on he 19th of July, 1837, for a distance of seven miles, being the same month in which Wheatstone and Cooke tested their apparatus on the London and Northwestern Railway.

The reason, however, which gives Wheatstone a priority of claim over Steinheil beyond the fact of his patent being obtained in the preceding month and being based upon many previously good successful experiments, is that until August, 1838, Steinheil published no description of his means of telegraphic communication, which he altered and improved in the interval; and the only information we have of his instrument describes its improved form. His apparatus, however, was a very meritorious one; for in addition to its other excellent qualities, Steinheil was the first to employ the earth to complete the circuit. But in its mechanical arrangements it was considerably inferior to Wheatstone's telegraph, and the former soon gave it up and adopted a modification of the contrivance of Morse. The celebrated dot-and-dash, or registration, system of this American professor, which has been generally used throughout the United States as its means of telegraphy, is treated of in the succeeding article.

The rapid interchange of intelligence between individuals resident in different nations and states and in different cities and towns, as well as within many of the great centres of population which Professor Wheatstone really commenced by his telegraphic system; and the splendid and most useful results which have followed from the early receipt of political, mercantile, and other news, both public and private, after it is committed to the telegraphic wires, — have been so marvellous and almost immeasurably beneficial, that no reasonable person who is acquainted with the grand experiments of this eminent man can justly question his title to be ranked among the more distinguished of our permanent cosmopolitan benefactors.

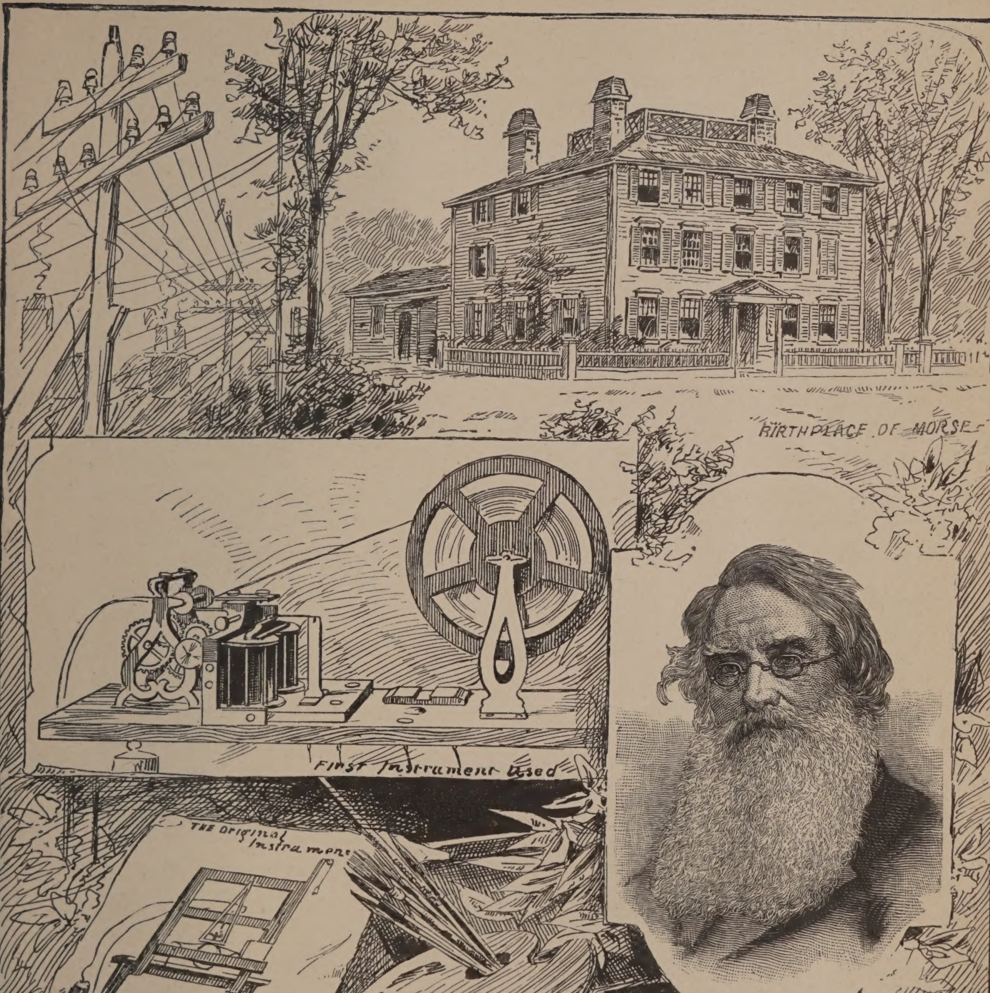
As to the honors which were conferred upon this illustrious professor, these were both important and numerous. In 1840, and again in 1843, he was awarded the Royal Medal of the Royal Society as a high acknowledgment of his meritorious experimental researches. He was also appointed vice-president of this society, and a corresponding member of the Imperial Institute of France and of the chief scientific academies of the principal capitals of Europe, and in addition received nearly thirty foreign distinctions. He was knighted in 1868, and died in Paris in 1875. Although he appears to have written but little for publication for the use of general readers, the scientific journals and transactions contain many durable records of his discoveries, applications, and inventions which have greatly furthered the progress of science and civilization throughout the world.

SAMUEL F. B. MORSE.

[Born 1791. Died 1872.]

SAMUEL F. B. MORSE, the inventor of the "Morse" system of telegraphy, was born at Charlestown, Massachusetts, April 27, 1791. He was the son of the Rev. Jedediah Morse, who is sometimes called the father of American geography, he having prepared and published the earliest text-books upon that subject that issued from the press of this country.

When young Morse was twelve years old, he was sent to Yale, where he exhibited a much greater aptitude for drawing and painting than he did for academic studies; so much so that Dr. Dwight, the president of the college, once severely reprimanded him for his want of application, and, thinking to reclaim the dull student by "heroic treatment," nearly broke the boy's heart by telling him that he was "no painter." Morse, however, thought otherwise, and upon leaving college he determined to adopt painting as his profession. To this end he went to Europe under the care of Allston, and in London he became the pupil of West. After studying four years under these masters, Morse returned to America, opened a studio, and began work as a portrait-painter. He pursued this calling with limited success until 1832, when, as he was returning home from England in the ship "Sully," the novel idea of transmitting intelligible signals by means of electricity became a topic of discussion among the passengers. Professor Jackson, who was on board, has declared that he first gave Morse the idea of its practicability. The subject immediately took such firm hold upon Morse's mind that thenceforth how to solve the problem became



SAMUEL F. B. MORSE.

the absorbing idea of his life. He brooded over it in secret; he attended scientific lectures; he patiently experimented with this new and mysterious agent until a method for practically adapting it to the end he had in view was found. There is no claim that Morse possessed peculiar knowledge in this branch of science. Such is not the fact. But it is certain that from the moment it first presented itself to his mind he grasped its great possibilities with peculiar intelligence; and he pursued his idea not only with such earnest conviction of its entire feasibility, but with such determination to succeed, as very shortly took the problem of electrical telegraphy out of the experimental stage in which he had found it, and placed it upon that of recognized practical utility. While it would be unjust to others to claim for him all the merit of this truly wonderful discovery,[1] Morse's invention is so distinctly original, so simple, and so thoroughly practical in its workings as to have advanced it at once to the head of all the methods that his age has produced, and it is to-day in more general use than any other.

The galvanic battery, the passing of an electrical current generated by it through a wire connecting the positive and negative poles of two such batteries, and the action of the electro-magnet were things that were then occupying the attention of the learned scientists of Europe. The discoveries of Volta and Arago were being steadily advanced by Faraday, Steinheil, and Wheatstone; but to Morse belongs the credit of having perfected a method of recording upon paper at one end of a wire the characters formed by the operator at the other, by simply opening and closing the telegraphic circuit. Its merits were so evident that Professor Steinheil with rare disinterestedness wrote to his American rival that he had decided to abandon his own system in favor of that of his distinguished *confrère*. Nothing, in fact, could be simpler than Morse's combination of the electro-magnet with his receiving instrument and manipulating key.

But before this admirable result was attained by Morse, there ensued a long period of toil, anxiety, and suspense, inseparable from the history of every great invention. It took Morse five years to get his own into shape so as to be able to file a caveat in the Patent Office at Washington, and three more to perfect his idea. It was not until 1844 that Morse obtained from Congress a grant of $30,000, which was the sum he asked for to enable him to construct between Baltimore and Washington the first telegraph line in America. While his bill was pending the inventor passed through all the alternations from hope to despair; for after its passage by the Lower House it was so buried underneath those bills having priority in the Senate that to reach it in the few remaining days of the session seemed an impossibility. On the last day Morse left the Senate Chamber at a late hour in despair. After paying his hotel bill he had only enough money left in his pocket to take him back to New York. He had staked everything upon the issue, and he had lost. It was now become an imperious necessity to abandon his darling project for some occupation that would at least give him a livelihood. At fifty-three such a prospect comes home to a man with overwhelming force. In this frame of mind, but with that unshaken courage characteristic of him, Morse prepared to leave Washington on the following day. In the morning, while the inventor was getting ready to start, he was notified that a young lady wished to speak to him. This early caller proved to be Miss Annie G. Ellsworth, the daughter of the Commissioner of Patents. She seemed to be in great spirits.

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[1] Refer to the article on Wheatstone.

"I bring you my father's congratulations and my own," she said.

"For what?" the surprised inventor asked.

"Why, upon your great triumph, to be sure; the passage of your bill."

"Ah! thanks, my dear child; but you are then ignorant that I only left the Senate at a late hour after seeing that the bill could not pass?"

"Oh, sir, is it possible that I am the one to first bring you this great news? The bill did pass; my father was there."

"Annie!" cried Morse, "the very first message which passes over my wires shall be yours."

This promise was faithfully kept.[1] By the month of May the wires had been hung on poles, and the two cities were connected. When all was ready Miss Ellsworth announced to the world the greatest achievement of the age in these four noble words, — "What hath God wrought!"

It is unnecessary here to record the progress of telegraphic communication throughout the globe. From the day that proclaimed his telegraph to be an accomplished fact, honors were showered upon its illustrious inventor from every quarter; and long before his death, which occurred in 1872, Professor Morse was permitted, with rare good fortune, to realize how great were the benefits that had accrued not only to science but to the human race through his instrumentality. To-day any interruption of telegraphic communication is an interruption of the business of the world, which would be followed by results disastrous not alone to commerce, with all its vast and varied interests, but also to the every-day wants of the people at large. As no other means of communication has ever performed such extensive or important functions as the electric telegraph is now doing, we cannot help regarding its discovery as the greatest step towards the universal brotherhood of nations that mankind has yet taken. Most truly has it annihilated space, and thus joined the hands of all peoples on the face of the globe in one grand, magnetic impulse towards a higher civilization, which through instant interchange of deeds or ideas is silently working out its promised fulfilment. Before this discovery Archimedes' boast fades into insignificance. With a spark Professor Morse has not only moved the world, he has illuminated it without other fulcrum than his own superior intelligence. This, in point of fact, is the *point d'appui* of the nineteenth century.

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[1] This valuable souvenir, which occupies about as much space as the palm of the hand, is now in the possession of Mr. Roswell Smith, of New York, Mrs. Roswell Smith being the Miss Annie Ellsworth referred to. An autograph from Professor Morse reads: "This sentence was written from Washington by me, at the Baltimore terminus, at 8 h. 45 min. A. M., on Friday, May 24, 1844, being the first ever transmitted from Washington to Baltimore by telegraph, and was indited by my much loved friend, Miss Annie G. Ellsworth. SAM'L F. B. MORSE, Superintendent of Elec. Mag. Telegraphs."

THOMAS ALVA EDISON.

[BORN AT MILAN, OHIO, 1847.]

MEN of genius are found in every age; but genius allied with fertility of resource, with breadth of view, with indomitable energy and persistency, is a gift too rare for Nature to bestow oftener than once in a century. When such a man appears, he rises head and shoulders above his contemporaries; and that is where Thomas A. Edison, by common consent, stands to-day.

His is the old, the oft-repeated story of a poor boy, of humble parentage, of scarcely any education, and with little or no equipment, discipline, or training, outstripping the profoundest thinkers of his time, and upon their own chosen ground. Those who have called Edison a mere man of expedients have failed to correctly gauge the calibre of his mind. Edison owes nothing to the schools, to society, or to patronage. He is a natural force, and as such has at last made his own way to universal recognition. Our Fultons, our Whitneys, our Morses, and our Edisons, all go to show that great inventors, like great poets, are born and not made, and that the New World is taking the lead in the grand march of progress.

Young Edison began life as a train-boy on a railway in the West. If we look at the date at the head of this article, we shall see that the inventor of the duplex and quadruplex systems of telegraphy, of the phonograph, and of the most practicable and satisfactory method of electric lighting thus far discovered, is not yet forty years old. Even as a boy, his brain was busy with problems that clearly prove an intellectual precocity, going far beyond his years. For instance, while

THOMAS ALVA EDISON.

he was selling newspapers, as a mere lad in his teens, it occurred to him that if he were to telegraph short summaries of news to be bulletined at stations in advance of the arrival of his train, it would be a good scheme; upon this idea he acted. When the enterprising newsboy stepped out upon the platform, he was at once surrounded by eager customers, whose appetite for news had been whetted by reading his bulletins. Young Edison then conceived the idea of publishing a paper of his own, which was actually printed on board the train, though in the rudest manner; the impressions being taken from the types by rubbing the paper with the hand. It was here, too, that the boy first set his audacious foot within the domain of science. Unconsciously his true vocation was dawning upon his eager mind. He haunted the railway shops; he studied the mechanism of locomotives; and in moments of leisure he became an omnivorous reader of such books as Newton's "Principia" and Dr. Ure's Dictionary. The wonders of chemistry thus opened to him seized upon his youthful imagination so strongly that we presently find the lad buying up various chemicals, with which he set up his first laboratory in the same car that had served him for a printing-office. But alas for his hopes in this direction! In an unlucky hour his phosphorus one day set the car on fire. The flames threatened destruction to the train and all on board. The young chemist, along with his types and bottles, was summarily ejected from the train for having put the lives and property of the passengers in peril by his carelessness.

By this time Edison had mastered the rudiments of practical telegraphy, and he had resolved to be an operator as soon as he could make his way into an office. We may see, even at this stage, how quick was his invention. On one occasion when the submarine cable between Port Huron and Sarnia had been broken by the ice, and telegraphic communication interrupted, Edison jumped upon a locomotive that happened to be standing by the river with steam up, and, pulling open the valve, proceeded to give with the whistle sounds corresponding to the Morse telegraphic signals. He repeated these signals, which of course drew everybody's attention by their noise, until the telegraph operator upon the other side of the river had caught the idea and had answered in the same manner, thus establishing the communication.

For the next few years Edison developed a good deal of the roving propensity of his class; but there were some things about him that very soon established his decided superiority among his fellows. In the first place he exerted himself to the utmost to become a skilled operator, working early and late, visiting the office after the regular hours for work were ended, and studying how to make his services most useful to his employers. But what speedily raised Edison above the rank of a mere master of routine work was the grand determination he displayed to fathom the mysteries of electrical science. Herein he showed the powers and attributes of a superior mind. To him the wondrous exploits that he daily performed on a slender wire had opened a new world filled with the most fascinating possibilities and promise. He became what some of his critics have asserted that he is not, — a scientific thinker; for there is not one of his discoveries that does not rest upon some principle the elements of which Edison has thought out for himself, or that has not in some way advanced the general cause of science by building upon what was already known. In a very short time he had devised the automatic repeating-instrument, by which a series of telegraph lines may be joined (practically speaking), and worked without the help of an operator at the connecting points. The "repeater" then in general use required the constant oversight of an operator to reverse and to keep it adjusted. To Edison this useful, labor-saving invention was only a step in the direction he was pursuing. He had become possessed with the idea that double transmission on a single wire was possible; and his experiments, his search among books, and his preoccupation soon gained for him the title of "luny" among his companions, besides discrediting him with his employers. A few years more passed, and the electricians as well as the uninstructed public were astounded by the announcement that a mechanism had been perfected by an unknown telegraph-operator, by which messages were being sent over the same wire in opposite directions at the same time. It was held to be an impossibility, an absurdity, in plain violation of all the well-known laws governing the action of electrical currents. But there was no getting over actual demonstration; for the "duplex basis" was soon doubling the capacity of overworked wires.

But we are advancing a little the story of Thomas A. Edison's development from a boy who dreamed dreams and saw visions into the man who has seen most of those visions realized to the fullest extent.

The year 1870 proved to be the turning-point in Edison's career. In that year he arrived in New York. His dabbling with inventions had lost him one situation after another. "Competent, but unreliable" was the verdict of one manager after another, who had tried him. Unsuccessful in procuring work, it is said that he wandered through the streets of the great city penniless, friendless, and hungry. One day he happened to step into the office of the Laws Gold-Reporting Telegraph Company. The office instrument was out of order, and the inventor in despair. Edison looked at it; he thought that he could make it work, and was permitted to make the trial. In a few moments he had the complicated little instrument ticking as usual, and was immediately employed. Edison's discouragements were now at an end. He at once began the work of improving the Indicator, and had very soon produced his Gold Printer. His inventions pertaining to this branch of telegraphy have largely superseded the old apparatus employed, and they have resulted in greatly extending the system throughout the commercial centres of the country. Means were now at Edison's command. Business flowed in upon him in a steady stream. Establishing himself in Newark, New Jersey, Edison became the head of a manufactory for turning out his improved instruments. With three hundred workmen, with full scope for his ingenuity, his inventions multiplied so rapidly that he was described by the Commissioner of Patents as "the young man who kept the path to the Patent Office hot with his footsteps." Most of these were for improvements in electrical apparatus or methods of transmission; and indeed it must be admitted that Edison's most solid successes are his telegraphic inventions. Perceiving his value at last, the same company from whose service Edison had been repeatedly turned away on account of his so-called vagaries was now glad to retain him at a munificent salary in consideration of securing for itself the first chance to use his discoveries. When we state that Edison's patents relating to telegraphy alone already number not far from a hundred in all, the value of this connection, as well as the point of the remark that "Edison kept the path to the Patent Office hot with his footsteps," will fully appear.

It was during the summer of 1874, at Newark, while experimenting with the view of introducing certain modifications into the duplex apparatus, that Edison discovered the basis of the quadruplex system of telegraphy. "The distinguishing feature of this method consists in combining at two terminal stations two distinct and unlike modes of single transmission in such a manner that they may be carried on independently on the same wire and at the same time without interfering with each other." One of these methods is known as the double-current system, and the other as the single-current or open-circuit system. By making use of these two methods, combined with the duplex principle of simultaneous transmission in opposite directions, four sets of instruments may be operated at the same time on the same wire.

In 1873 Edison was married to Miss Mary Stillwell, of Newark. An incident is related of the honeymoon as tending to show how entire was the absorption of the inventor in his work. One of his friends upon returning home at a late hour saw a light in Edison's laboratory, and climbed the stairs to find the inventor plunged in one of his characteristic stupors over some problem that happened to be taxing his mind to the utmost. Seeing his visitor standing before him, Edison roused himself and wearily asked the hour. "Midnight," was the reply. "Then," said the inventor, "I must go home. I was married to-day."

The Phonograph, or "Talking-Machine," was discovered, according to Mr. Edison, by the merest accident. For a time it astounded the ignorant and the learned alike; for even when the simple nature of the mechanism that could repeat all possible modulations of the human voice with absolute fidelity was clearly understood, there seemed at first sight no limit to the possible uses for which such an instrument might be employed. A world of delighted speculation was quickly opened; but thus far the Phonograph has developed less practical value than was hoped for it.

Said Mr. Edison to some friends at Menlo Park: "I was singing to the mouthpiece of a telephone, when the vibrations of the wire sent the fine steel point into my finger. That set me to thinking. If I could record the action of the point, and then send the point over the same surface afterwards, I saw no reason why the thing would not talk. I tried the experiment, first on a strip of telegraph paper, and found that the point made an alphabet. I shouted the word 'Halloo! Halloo!' into the mouthpiece, ran the paper back over the steel point, and heard a faint 'Halloo! Halloo!' in return. That 's the whole story. The discovery came through the pricking of a finger."

When Edison's phonograph was first exhibited to the Academy of Sciences a murmur of admiration was heard from all parts of the hall, — a murmur succeeded by repeated applause. Yet some members of a sceptical turn started a report that the Academy had been mystified by a clever ventriloquist. Repeated experiments were required to convince these incredulous persons that no chicanery was used, and that after a few trials they could manipulate the phonograph as easily as Mr. Edison's agent had done in their presence.

Edison's own discoveries, or his application of new principles to the discoveries of others, have come so thick and fast that we must be content with a simple reference to the more important ones. His Carbon Telephone was one of the earliest and most interesting improvements made upon the telephone of Professor

Bell, who is the subject of an article in this volume. Edison began his experiments in the early part of 1876 with the Reiss Transmitter; and after continuing them a long time with no great success, he at length found that a simple carbon disk, made of lampblack, was the key to the problem which he had been so long endeavoring to work out. The carbon button, or disk, was the essential factor. For this telephone Edison received the sum of $100,000. It at once greatly enlarged the sphere of telephone communication by making it available for conversing at greater distances than had been practicable with the telephones in common use. Upon being put into the telegraphic circuit between New York and Philadelphia it was found to work well, while the other telephones would not transmit intelligible sounds. The following year (1879), Edison's apparatus was tested on a wire 210 miles long, between Chicago and Indianapolis, and was then found to work with the best results.

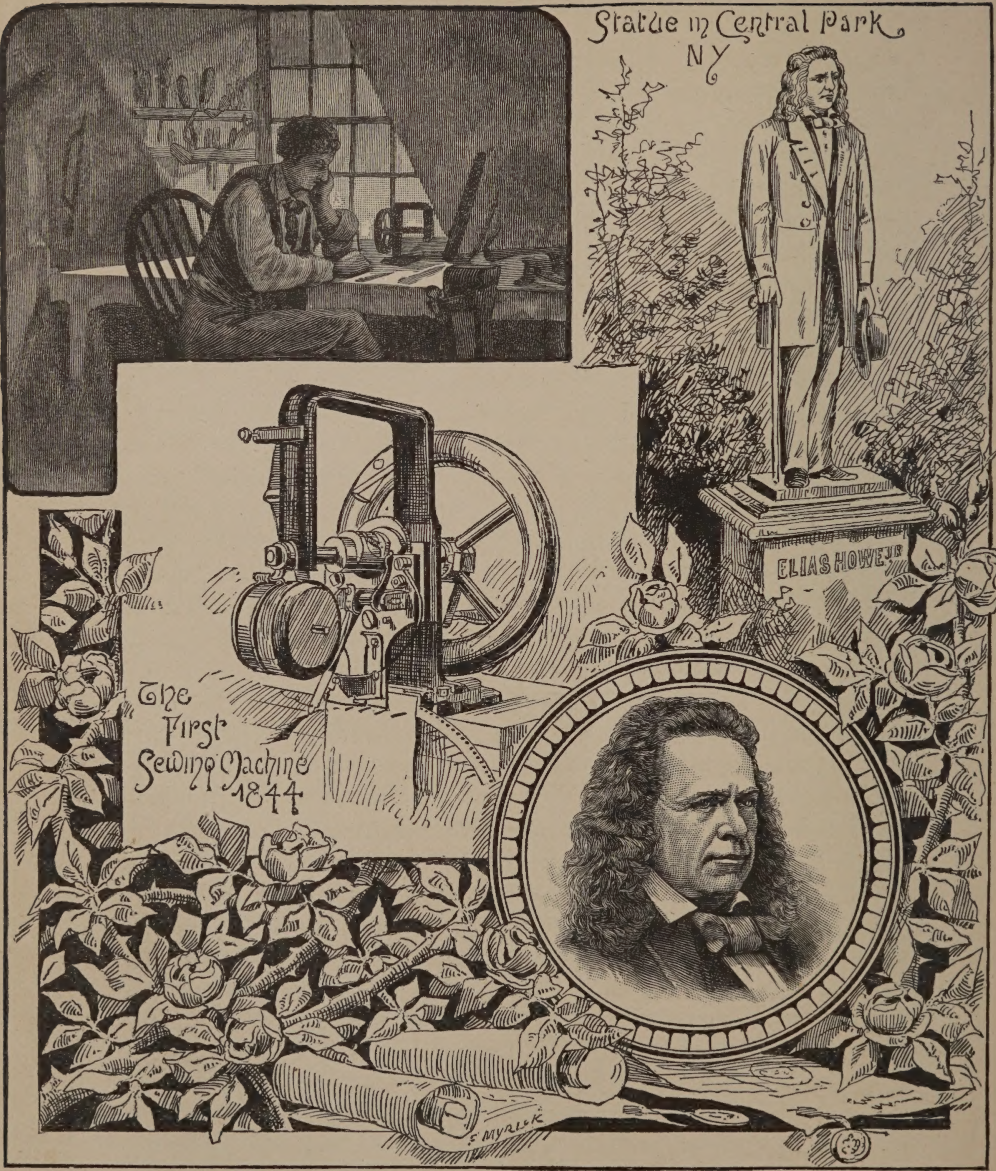
The Megaphone is a combined speaking and ear trumpet, by which persons may converse in the open air when several miles apart. It was suggested by the phonograph. There are two great ear-trumpets and one speaking-trumpet mounted together upon a tripod. Mr. Edison has applied the same principle to a smaller instrument to be used by deaf persons, who may thus hear a whisper distinctly in the largest public hall, and so practically overcome a defective hearing. One objection that we have heard urged against the use of the megaphone out of doors is that it collects all intervening sounds coming within its range, even the twitter of birds and the cropping of the grass by animals being confusedly heard.

We now come to that most beneficent of modern discoveries, the electric light, — the only artificial light whose brilliancy approaches that of the sun. It is now coming into common use, both for out-of-door and in-door illuminations, — streets, railways, manufactories, theatres, steamships, and lighthouses being already included in its practical working, — and the public are now awaiting with impatience its promised introduction into private houses in the same manner and as a substitute for gas. When this shall be fully accomplished, as much will be added to the comfort and safety of every home as has already been secured to simple pedestrians and travellers at home or abroad. It is to the elucidation of this particular problem that Edison has latterly directed all his resources.

Although the general principle of the electric light is more or less clearly understood, to the multitude it remains as great a phenomenon as ever. Stated as briefly as we can do it, this principle is that the passage and play of an electric current across a break by means of electrodes — like carbon, for instance — brings those substances to a white heat, or glow, which is maintained so long as the conducting substance is not consumed. Every one has seen the effect of a jeweller's blow-pipe upon a piece of charcoal. So, if two carbon pencils are attached each to one end of the conducting wire, and are then brought nearly into contact, the electric current or spark will freely pass from one to the other, and combustion of the carbon sticks takes place. This produces that dazzling white light used for illuminating streets or other open areas, and is called the "voltaic arc," or, briefly, the "arc light," from the nature of the flame. The light is kept steady by clockwork, which moves the carbon pencils nearer as they are consumed. To produce a light of the desired intensity the electric current must be of corresponding energy, or what would be sufficient to kill a man or a horse as quickly as a stroke of lightning if passed through the body of either; so that, unless they are buried underground, the electric-lighting wires constitute an element of danger. Sir Humphry Davy was the discoverer of the voltaic arc.

The second method of electric lighting, and the one to which Edison is almost exclusively devoting himself at this time, is that usually known as the incandescent light. This is bringing carbon to incandescence within a vacuum by the same means we have just described. But the results are far different; for the flame is now enclosed within a glass bulb instead of being exposed like a gas jet, and is therefore safer for interior illumination. Not being in contact with the air, the light is also steadier and more constant, and the waste of the carbon is checked. When Edison came to the investigation he had never seen an electric light; but at the Paris Exhibition of 1881 Edison's improvements in the whole system of electric lighting by incandescence were pronounced by experts far the best of any then submitted. In speaking of the various exhibits of electrical lamps, Mr. Preece, one of these experts, says that the lamp which possessed the greatest novelty and was decidedly the most efficient was that of Mr. Edison. The distinctive character of the Edison lamp is the remarkable uniformity of its texture and light-giving power. It consists of a fine filament of carbon, not much larger than a horse-hair, inserted as a part of the electric circuit inside a glass globe which has been exhausted of air to the utmost attainable limit. A fine uniform quality of Japanese bamboo has been selected as giving the best filament for carbonizing. This filament is warranted to burn for six hundred hours. The whole lamp can be unscrewed from its socket and replaced by another lamp in a moment. When it is thus detached the electric circuit is of course broken and the light extinguished. When replaced, the circuit is perfected and the lamp instantly relights itself. There are no cocks to be turned on or off, and there is no gas to escape. Nothing could be simpler in its working or more beautiful in its results.

"What constitutes Mr. Edison's system," remarks the Comte du Moncel, "is not alone his lamps; it is the totality of the arrangements referring to them, which have attained such a degree of simplicity that henceforth nothing remains to be desired in practice. Generating machines, distribution of circuits, installation, indicating and regulating apparatus, meters for measuring the amount of current employed, are all combined for immediate application." In fact, every detail has been thoroughly worked out by Mr. Edison, whose lamps to the number of 75,000 are already in use throughout the world, some 18,000 being found in the stores, mills, and workshops of New England. In New York the Edison system has already been applied to the lighting of a district a mile square, in which the supply of dwelling-houses is included; and in Brockton, Massachusetts, the same system is now in course of installation for lighting the numerous factories of that thriving city, the supply in each case


Statue in Central Park
NY
ELIAS HOWE JR
The First
Sewing Machine
1844
F. MYRICK

ELIAS HOWE.

being generated at a central station and distributed throughout the district to be lighted by subterranean wires.

Mr. Edison's workshop at Menlo Park, New Jersey, is a hive of industry, in which the inventor is the animating genius. His first announcement of the perfection of his incandescent light was received in Europe with a general cry of derision. In the "Encyclopædia Britannica" of so late an issue as 1878, Edison is not even mentioned. His extraordinary talents have at length commanded universal recognition, and to-day he stands without a peer among the discoverers and inventors of his age.

ELIAS HOWE.

[Born 1819. Died 1867.]

THE miseries that have been borne by those who, had they lived in our own time, need not have been ground by want, is one of the saddest reflections that can come to us. We cannot explain why these things are. It is this reflection that gives point to Hood's famous "Song of the Shirt;" for since the sewing-machine is now found in every household, however humble, no woman starves over her needle. Thanks to that wondrous piece of mechanism, the needlewoman of to-day is no longer one of a class whose deplorable condition calls for special effort on the part of the philanthropist. To her, indeed, more than to any other, has the sewing-machine proved a priceless blessing; for not only has it prodigiously extended the scope of woman's labor, but it has raised that labor from its former condition of hopeless and ill-paid drudgery to one easily performed and fairly remunerative. We think there will be no dissent from the statement that the sewing-machine has done more to broaden the working-woman's opportunities than any invention of the century.

We are not now to state by an array of facts and figures how much the invention of Elias Howe may have added to the productive industry of the world; but we may say, briefly, that the gross sum contributed by the various departments of skilled labor in which sewing-machines are employed has reached an enormous sum total. Not only has the invention superseded many of the older methods employed in the manufactures of cotton, silk, or woollen fabrics, but even such refractory substances as leather are now easily made up into the thousand and one articles for which those substances are adapted.

The first attempts to make a machine that would take the place of sewing by hand go as far back as 1755, and they originated in Europe. Quite a number of persons are credited with having got hold of the crude idea that sewing by machinery was practicable, and one after another attempted the devising of a mechanical contrivance for the purpose. Each may be said to have contributed something to the general result, although no one had succeeded in attaining it. Freisenthal's, Alsop's, Duncan's, Heilman's, Saint's, and Thimonier's experiments were each and all approximations toward the desired end. But neither of these persons had yet solved the problem, although Thimonier had so nearly succeeded that a mob of working-men destroyed his machine for fear it would take the bread out of their mouths. Walter Hunt is the first American who brought the sewing-machine problem nearly to the point of practical demonstration. This was in 1834. But he stopped here, either baffled or discouraged by the obstacles he found even his ingenuity unable to overcome; and his machine, which embodied what is known as the "lock-stitch," rusted in a garret until a man of clearer head and greater persistency had worked out his own idea independently of any other, and so gained the prize which Hunt was so near grasping. This man was Elias Howe; and it is a pleasure to record that his claim rests upon no doubtful or insecure foundation, for it has been assailed by every possible form of judicial inquiry and has come out of the ordeal triumphantly.

Elias Howe was, in fact, a genius of the first rank, — one of the kind that is seldom appreciated by its own age, to whom a man's personality is everything. No inventor ever endured greater vicissitudes, or came out of them more triumphantly, than did Elias Howe. The son of a farmer who lived in Spencer, Massachusetts, he had found his way first to a workman's bench in a Lowell machine-shop, and then, in his twentieth year, to a mathematical-instrument maker's in Boston. He had married young, and had a family dependent upon him for their daily bread.

One day Howe overheard a conversation that was going on between the master of the shop and a customer over a knitting-machine that the latter had brought in for examination and to see if its defects could be remedied. After inspecting the crude and incomplete device before him awhile, the master broke out with,—

"What are you bothering with a knitting-machine for? Why don't you make a sewing-machine?"

"I wish I could," said the other; "but it can't be done."

"Oh, yes, it can; I can make a sewing-machine myself."

"Well, then," said the customer, "you do it, Davis, and I'll insure you an independent fortune."

The idea thus dropped, probably more in bravado than in sober earnest, nevertheless took firm hold on the young journeyman's mind; but it was several years yet before he seriously applied himself to working it out to the exclusion of everything else. It was, in fact, ten years after Hunt had constructed his machine before Howe took hold of the matter at all; but we do not find that he knew anything whatever of that most ingenious man's attempts. In December, 1845, with the help of a friend who advanced the means necessary for his own and his family's support, Howe shut himself up in a garret in this friend's house, and for six months worked with dogged perseverance over the slowly developing mechanism that finally embodied his idea of a sewing-machine. It was finished, patented, and exhibited in successful operation to admiring crowds. But it found no purchasers. No one would touch it. Howe's partner became disheartened, and abandoned the enterprise in despair; for now that the sewing-machine was an accomplished fact it seemed even more difficult to convince the public of its practical utility than it once had to create the machine itself. This first sewing-instrument applied the principle of the curved needle, with the eye near the point that perforated the cloth, and of a shuttle that by moving rapidly to and fro carried a second thread through the loop formed by the needle, and in this way made the seam commonly known as the "lock-stitch."

Convinced that nothing was to be done in the United States, Howe took his machine to England, where he was glad to sell it, together with the patent right for Great Britain, for a paltry £250, in order that he might be able to pay off some of his debts. The shrewd purchaser, who was a manufacturer named Thomas, soon secured a patent both in England and in France, thus obtaining an absolute control of the invention in those countries, subject only to the payment of a small royalty to the inventor. The money Howe had thus procured was soon gone, and he then had to seek employment as a means of livelihood.

Again Howe became a workman dependent upon the labor of his hands; but even this resource so often failed him that he was forced to borrow small sums — on one occasion a shilling — to keep himself from starving. Howe finally got a passage home to the United States, where he arrived destitute of everything but the pluck that had never deserted him even when he did not know where his next meal was coming from. To his surprise, and not altogether to his delight, he found that in his absence the sewing-machine had steadily grown in the appreciation of the public, and was at that time employing all the resources of other skilful inventors, who aimed to bring it to a still higher state of perfection. From the piece of ingenious mechanism of problematical worth at which it had first been estimated, the sewing-machine had now advanced to a position of admitted utility; and this fact, in a country where manual labor of every kind was so dear as it was in the United States, assured its success beyond a doubt. This too stimulated the exertions of others besides Howe to obtain control of the manufacture and sale in the United States. Howe found his rights endangered. In Mr. I. M. Singer, Howe encountered his most energetic and formidable competitor. The courts were appealed to. They decided that Elias Howe's claim to be the original inventor of the sewing-machine was good and valid; and from that day the struggling mechanic, the man of brain and pluck, began to receive the reward of genius.

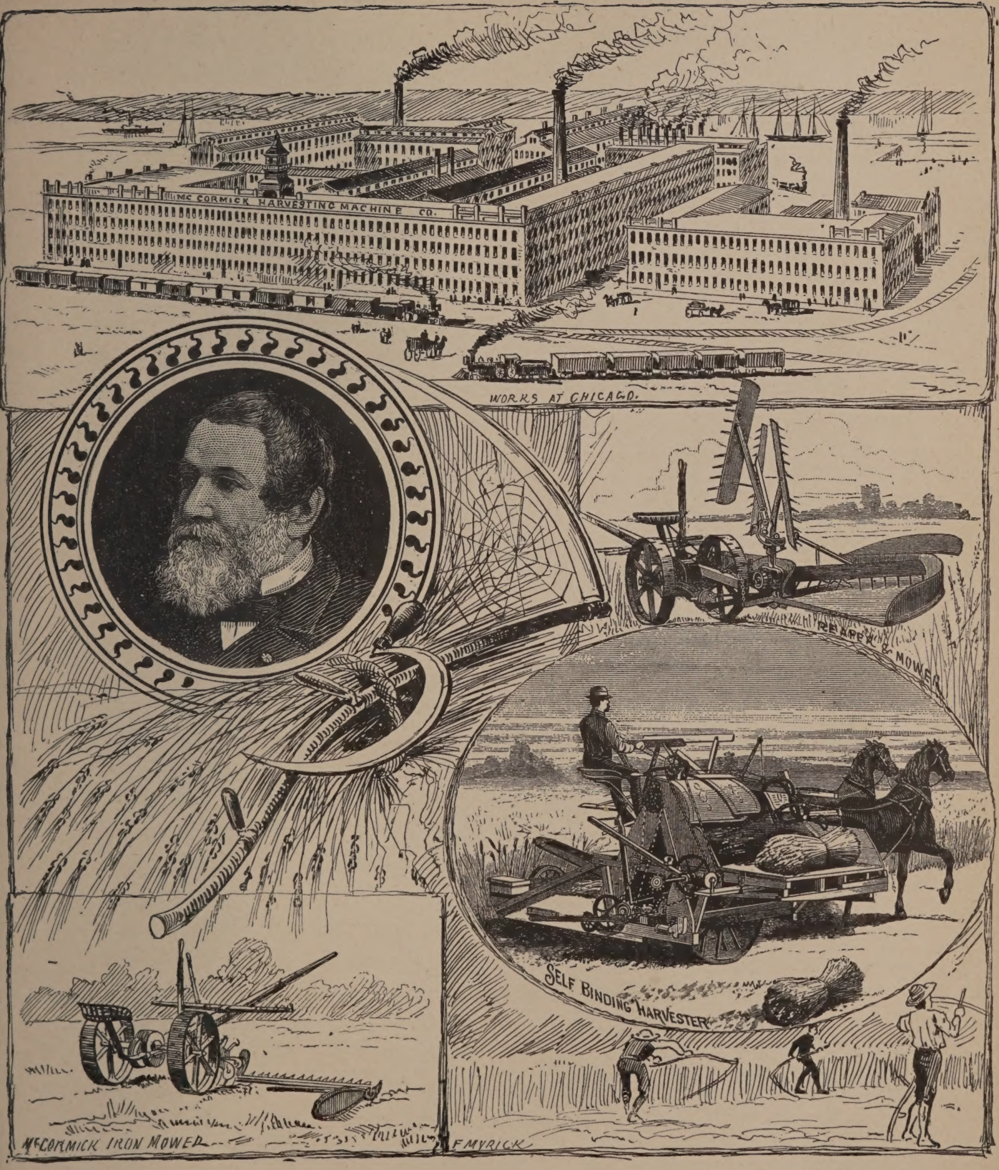
It is not our purpose to write the history of sewing-machines further than to record these incidents in the life of Elias Howe. In a few years he rose from poverty and obscurity to affluence and the possession of a great name; but even the greatness of the reward does not seem too much in view of the benefits secured to mankind, or the obstacles that had to be overcome before these results could be attained. It is characteristic of nearly all really great inventions that they have occupied the minds of several different persons at the same period of time, but it is seldom indeed that the rights of a claimant have been so universally conceded as they have in the case of Elias Howe and his wonderful little mechanism. Nor is there a particle of evidence going to prove that Howe pursued any other plans than such as were the coinage of his own fertile and inventive brain.

During the great civil war between the North and the South, Mr. Howe's zealous patriotism led him to enlist as a private soldier in the Seventeenth Connecticut Volunteers. To this example of what a citizen in any station owes to his country whenever that country may demand the sacrifice from him, Howe also added the voluntary use of his means for the payment of the regiment. He served until failing health compelled his retirement from the ranks; but this simple incident has conferred upon the eminent inventor and millionnaire an honor greater in its way than any he may have derived from the ribbon of the Legion of Honor, or from those other decorations that marked the appreciation of foreign governments for his achievements in the domain of mechanical science.

CYRUS HALL McCORMICK.

[Born 1809. Died 1884.]

AN English journal frankly gives credit to American genius for at least fifteen inventions and discoveries which, it says, have been adopted all over the world. These triumphs of American genius are thus enumerated: First, the cotton gin; second, the steamboat; third, the grass-mower and grain-reaper; fourth, the rotary printing-press; fifth, the planing-machine; sixth, the hot-air or caloric engine; seventh, the sewing-machine; eighth, the india-rubber industry; ninth, the machine for manufacturing horse-shoes; tenth, the sand-blast for carving; eleventh, the gauge-lathe; twelfth, the grain-elevator; thirteenth, artificial ice manufacture on a large scale; fourteenth, the electro-magnet and its practical application; fifteenth, the composing-machine for printers. To these should be added the improvements in practical telegraphy, the telephone, and the electric light; and even then the catalogue will be far from complete. The most suggestive thought, as related to the world's progress, is that a single century covers the whole list just enumerated, while a majority of the inventions have seen the light within half a century. Americans may well point with pride to a record at once so remarkable and so honorable in a country which has only just begun to measure its own achievements with those that the Old World is producing as the fruit of centuries of preparation of the ground. All eyes are now turned to the future with the conviction that it will show no less beneficent results to human progress than the present has done. In the meantime miracles are being performed under our eyes every day, we might almost say every hour.



CYRUS HALL McCORMICK.

Different inventions possess, of course, a relative importance. Those which add to the material wealth of nations are unquestionably greater than those that contribute exclusively to the comfort or convenience of mankind. By common consent that man is a benefactor who has made two blades of grass grow where only one grew before. We need not pursue so suggestive a simile. Of the class of inventors who create national wealth we have had in the United States two notable examples, namely, Eli Whitney and Cyrus Hall McCormick. What Whitney's gin did for the South has already been shown by the most irrefragable testimony. What McCormick's reaper was doing for the North so long ago as 1859 was estimated by the Hon. Reverdy Johnson to equal "an annual income to the whole country of fifty-five millions of dollars at least, which must increase through all time;" and William H. Seward said that McCormick's invention had advanced the line of civilization westward thirty miles each year. In this connection it is interesting to note that while the North gave to the South the cotton-gin, the South has given to the North the reaping-machine; but to inventions of such universal utility as these are, neither section may lay exclusive claim, — for both the gin and the reaper have become the common property of nations, and each has gone into and is doing its appointed work in the remote parts of the earth in the interest of the great common weal.

We find that the idea of harvesting grain in some more expeditious way than by hand labor goes back to a remote period; and we are also assured that certain crude efforts to construct machines for the purpose have tangible record in the patent-offices of European countries as well as in our own. Many may have been engaged for a long time in unsuccessful or only partially successful attempts to bring their schemes to perfection, who have come before the public to contend for the merit justly due to the more fortunate or more skilful inventor. But such failures become only more conspicuous by a comparison with achieved success. The world extends its sympathy to baffled or half-successful inventors, but it recognizes and reserves its rewards only for accomplished facts. To demand recognition for a failure is to belittle the efforts of genius by claiming distinction for mediocrity. The reaping-machine is no exception to the history of every really great invention. It has been claimed for the unknown, the unpractical, and, above all, for the unsuccessful competitor whose work, be it said, has been brought to notice chiefly through the efforts of a mind greater than his own.

Cyrus Hall McCormick, the inventor of the reaping-machine, and the subject of this brief sketch, was born at Walnut Grove, Rockbridge County, Virginia, February 15, 1809, and was therefore, at the time of his death, in his seventy-sixth year. His parents were of Scotch-Irish descent, a race noted for energy, sturdy independence, and thrift. Young McCormick's inventive genius developed early in life. This trait of character he seems to have inherited from his father, Robert McCormick, who, though a planter, owned several saw and grist mills, and kept a carpenter's and blacksmith's shop, in which were made and repaired nearly all the tools and machinery required on the farm. He was the inventor and patentee of several valuable machines for threshing, hydraulic hemp-breaking, etc. In 1816 he had devised a reaping-machine with which he experimented in the harvest of that year. Disappointed in his experiments, he laid it aside, and did not resume work on it again for fifteen years. He then added some improvements; but on testing it again in a field of grain, he became so thoroughly convinced that its principle was wrong that he abandoned it as a Utopian idea, just as all his predecessors in reaper-inventing had done before him.

During these years young Cyrus was improving his time in becoming an adept in handling tools and in the study of machinery, while assisting his father to work out his inventions. At fifteen the lad had turned his own mechanical training to such purpose as to contrive a grain cradle, and, five years later, a hillside plough, which was the first self-sharpening plough ever invented.

Very much against his father's judgment, young McCormick next turned his attention to the abandoned reaper. Avoiding the errors that had proved fatal to all previous attempts, he devised a machine wholly unlike anything that had been projected, or, so far as he knew, even thought of. As one by one the problems involved presented themselves to his mind, his ingenuity provided for them. First came the cutting-sickle, with its fast alternating and slow advancing motions; second, the receiving platform upon which the cut grain should fall and be cared for; third, the reel to gather and hold up the grain in a body. These three salient points being decided upon, it remained to bring them into harmony as co-operating parts of one machine; and here the inventor's training in his father's workshops became of great use to him. Perseverance finally enabled him to work out the various mechanical combinations that he had outlined in his mind, and it was then a comparatively easy matter to mount the machine on wheels, which by intermediate gearing gave the required motion to the sickle and reel. These successive steps were taken little by little, but they were taken surely and upon sound judgment. In 1831 McCormick had the great satisfaction of completing with his own hands and by his own unaided ingenuity, and of successfully testing in the harvest field, the first practical reaping-machine that the world ever saw. It is evident, however, that McCormick at twenty-two had formed no adequate idea of the value of his invention; for we now find him laying it aside in order to go into the iron-smelting business, which he considered as opening a broader and more lucrative field to his ambition. The panic of 1837, however, brought financial ruin to the new enterprise. McCormick's business partner secured his own private property, leaving the smelting business and the junior partner to their fate. It is most honorable to McCormick that in a situation at once so trying and so disheartening as this proved to be, he with rare integrity and determination set to work paying off his own debts, though it was at the sacrifice of everything he possessed.

But in the light of present knowledge we may consider what McCormick no doubt felt to be a most cruel reverse of fortune, if not ruin to his future prospects in life, as one of those blessings in disguise, which men indeed do not know how to accept, but are nevertheless wisely ordered, to bring out the best that is in them. In the discarded reaper McCormick had a resource both congenial and stimulating. To that he therefore turned his attention, and from that day onward we have only to chronicle his successes.

In 1834 his first patent was secured, when he began the manufacture of the machine on a very limited scale, cautiously feeling his way with it, as he went along, while engaged in other pursuits, for he had not yet fully realized the value of his invention. A second patent was taken out for important improvements in 1845. Additional patents issued in 1847 and 1848 for further improvements. In the year last mentioned seven hundred machines were built and sold. Other valuable patented improvements have since been added. When McCormick began his experiments the harvesting of a single acre was considered a fair day's work for one man. The reaping-machine as now perfected is capable of cutting and binding in sheaves, under the management of a girl or a boy having skill enough to drive a pair of horses, at the rate of two acres per hour. His earlier patents having expired, a refusal by the Patent Office to renew them threw open to competition all the leading features of the invention. The expiration of the first patent — that of 1834 — happened at a most critical moment for McCormick, who was then devoting himself to the introduction of his first machines; but disappointments like these, or perplexities incident to infringements of his patents by rival manufacturers, seem only in the case of McCormick to have produced still greater exertions followed by greater successes. Allowing them free use of his expired patents, he still kept ahead of his competitors. The inventor of the sewing-machine had been able to secure a judicial confirmation of his rights to the principle of this wonderful mechanism, although the greatest improvements in it had not come from his hand or brain. McCormick, as we have seen, failed to obtain an equally equitable decision in his favor, and for the reason that his inventions were too valuable, in the opinion of the Patent authorities, to be the exclusive property of any one man.

In 1845 Mr. McCormick had removed to Cincinnati, Ohio, for the purpose of establishing himself there; but with that keen foresight so characteristic of him, he was among the first to see the advantages which Chicago even at that early day possessed for becoming the commercial centre of the West. He accordingly removed there in 1847, and began the erection of the first reaper works.

When the success of the machine was assured, Mr. McCormick spent much of his time abroad, in bringing his machine to the notice of European agriculturists. In 1851 he attended the World's Fair in London with his machine. During the early weeks of the exhibition it was the subject of much ridicule on the part of those who knew nothing of its character or its capabilities. Even the "London Times," in an article casting contempt on the poor show made in the American Department, characterized the reaper as a monstrosity, something like a cross between an Astley chariot and a flying-machine.

A few weeks later, when the machine was practically tested in the English harvest fields, ridicule was turned into admiration; and those journals which, like the "Times," had sneered at the reaper on account of its queer looks, could not now say enough in its praise. The "Thunderer" declared it equal in value to the entire exhibition. McCormick suddenly found himself famous. His reaper received the grand Council medal of the exhibition. The press everywhere rang with his praise, and he was cheered, feasted, and toasted wherever he went. Greater honor has never been awarded to an American inventor. His was the rare gratification of having conquered the prejudice against everything American by exhibiting in practical operation the most skilfully contrived, the most original, and the most useful contribution to the needs of the great agricultural classes. It is true that McCormick had for some time longer to contend with efforts to belittle his invention on the part of those who could not be reconciled to the idea that this unknown and unheralded American had carried off the honors of an exhibition that was expected to assert the superiority of British inventors, and so had secured the prestige for his own country. But if John Bull is slow to admit himself vanquished, he is at least hearty in making due acknowledgment when fully convinced of error. The achievement of McCormick seems all the greater when we consider the nature of the obstacles which had to be overcome before the merits of his reaper were fully recognized in Great Britain. In the face of much carping criticism the inventor pursued the even tenor of his way, exhibiting, explaining, and vindicating his machine from attack with a persistency, a confidence in the great merit of his creation, that cannot fail to win our respect for those resources of mind that were always equal to the demands made upon him.

At subsequent International Expositions — such as those at Paris in 1855; London, 1862; Hamburg, 1863; Paris, 1867; Vienna, 1873; Philadelphia (Centennial), 1876; Paris, 1878; Royal Agricultural Society, England, 1878; Melbourne, 1880; Royal Agricultural Society, England, 1881; Christ Church, New Zealand, 1882; Grosetto, Italy; and at Louisville, 1883 — McCormick was equally triumphant. In addition to these high honors, often won in opposition to all the contesting machines of Europe and America, Mr. McCormick was decorated with the Cross of the Legion of Honor at Paris in 1867, and at the succeeding Exposition of 1878 further honored with the decoration of Officer of the Legion of Honor; and he was elected a member of the Academy of Sciences in the Department of Rural Economy, as "having done more for the cause of agriculture than any other living man."

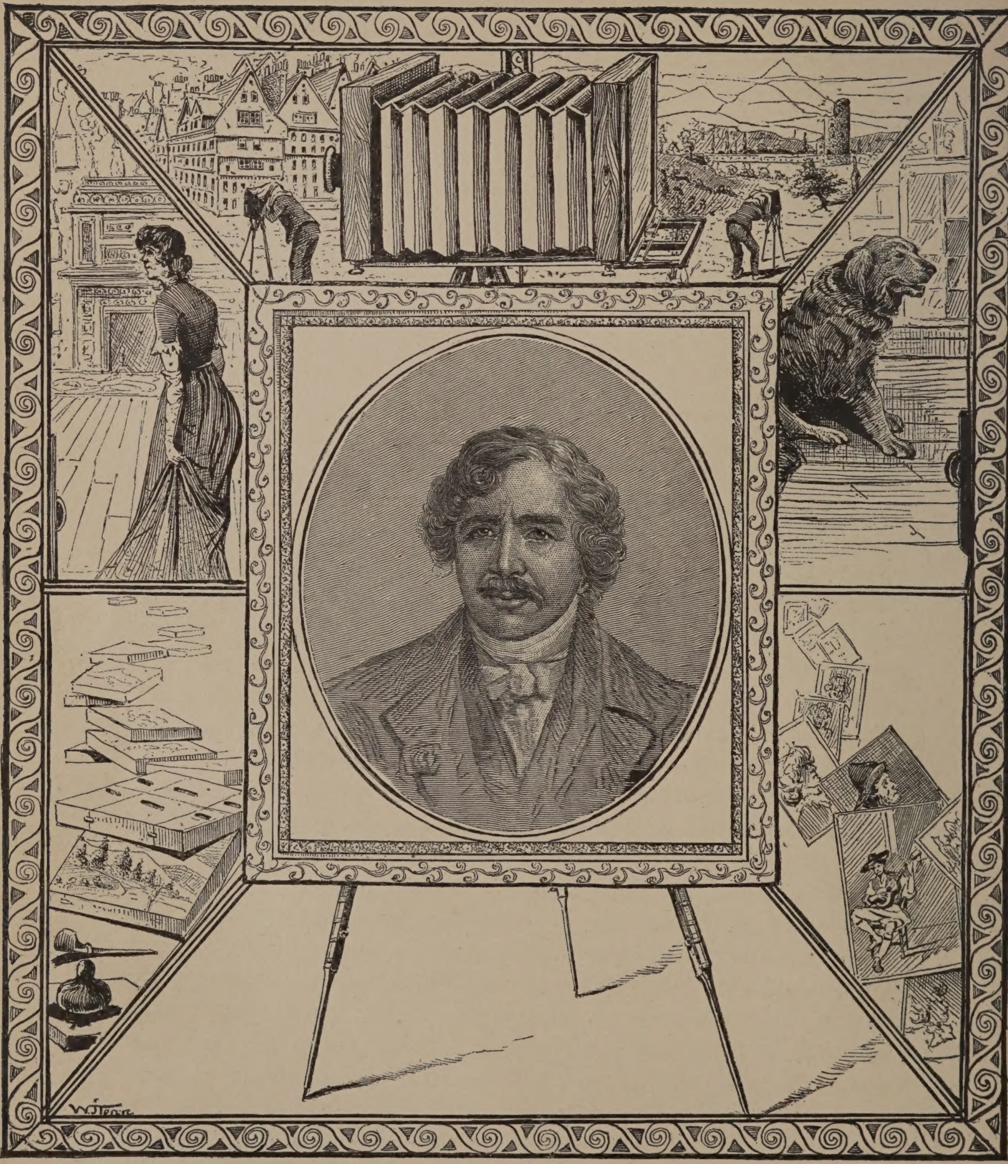
Unlike most inventors, Mr. McCormick has been noted for the energy and shrewdness of an eminently successful business man, having in himself the rare combination of inventive ingenuity, mechanical skill, and tact to manage a business that has now been extended all over the world.

In 1858 Mr. McCormick married a daughter of the late Melzar Fowler, a niece of Judge E. G. Merrick, of Detroit, — a most beautiful, accomplished, and refined lady, whose gentleness, charity, and good deeds adorn the position she occupies. Three sons and two daughters complete the family circle. The eldest son, C. H. McCormick, is in his twenty-fourth year, and is assisting in the management and control of the immense business interests left by his father.

It is gratifying to write that some part of the wealth which Mr. McCormick amassed from his inventions, in the course of a long and arduous business career, has taken the direction of practical philanthropy. Like the late George Peabody, the subject of our biography preferred to give during his lifetime, to the end that he might see, or better direct, the fulfilment of those benevolent objects which his philanthropy aimed to bring about. He was the founder of the Presbyterian Theological Seminary of the Northwest, at Chicago, having at the start donated $100,000 to endow a professorship in that institution; and during the years of its early struggles, before its ultimate success and permanency were secured, his purse was ever open to replenish its empty treasury, until he had nearly trebled the amount of his original donation. He also liberally remembered Washington College, and other institutions of his native State of Virginia. The city of Chicago, which was for thirty-seven years Mr. McCormick's adopted home, owes to him no small share of her great prosperity, as well as her increasing prestige at home and abroad. He had always been actively identified with the building up of this almost phenomenal American city; and after the disastrous fire of 1871, by which his own extensive works were laid in ashes with the rest of the city, he was one of the first to commence building again, thus inspiring confidence in others to follow his example. The new works occupy a tract of twenty-five acres. They are substantially built, and are furnished with every appliance requisite for turning out 50,000 machines annually, — that enormous figure, showing an increase in ten years of 32,000 and in fifteen years of 40,000 machines manufactured and sold, having been reached in 1883.

To show what the reaping-machine has done for the age we live in, and more particularly for the Great West, would be our most congenial task, were not the facts within the recollection of every man living. It is an amazing record, one unmatched by any similar achievement even in this age of marvels. Old methods have been revolutionized. What was an uninhabited and unproductive region forty years ago has been converted into the great granary of the world, with a population of millions, a thrift as boundless as its resources, and a weight in the nation that is already turning the scale against the older States of the East as the seat of power. "Tickle me with a hoe and I laugh with a harvest," is the promise held out to those farmers who have delved all their lives in less kindly soils for a bare subsistence. In the East small farms are the rule; in the West they are the exception. And as the ability to cultivate large tracts — sometimes equalling in size a European principality — comes wholly from the introduction of improved machinery, so the work of estimating the past and present worth of a machine like McCormick's Reaper, which is not only labor-saving but labor-extending as well, is also the history of the marvellous development of a dozen or more new States and Territories of the Great West.

Even the most superficial study of the character of Cyrus H. McCormick shows us a man who would unquestionably have made his mark upon the age in any calling. A closer look forcibly suggests that admirable relation which such men hold to certain eras of extraordinary progress in the world's history. In McCormick we discover an inventor by heredity, but pre-eminently an inventor of the kind in whom an idea once seized upon becomes the fixed purpose of a lifetime, — an inventor who to superior intelligence unites the power of an iron will to achieve, and a certain grandeur of determination which knows no such word as fail. For a man so endowed one of the highest prizes that the world bestows upon the fortunate few might easily be predicted. It follows that in his lifetime McCormick reaped his abundant reward, both of honors and of more substantial wealth. But the world, which sees only the accomplished fact in its entirety, takes little note of the long and weary period of toil, the most exacting and unremitting to the inventor's brain, that has preceded the grand result. In a word, Mr. McCormick is a notable example of the typical, self-made American of the nineteenth century, whose achievements



L. J. M. DAGUERRE.

in the interests of human progress have produced effects the most beneficent to mankind, and are therefore not for an age but for all time.

L. J. M. DAGUERRE.

[Born 1789. Died 1851.]

AT the session of the French Academy of Sciences, held in January, 1839, M. Arago announced the remarkable discovery made by their countryman, M. Louis Jacques Daguerre, by which the long-sought method of fixing the images of the *camera obscura* had at length been perfected. M. Daguerre had explained in advance confidentially to M. Arago the processes by which this result had been secured; so that the able and learned speaker was able to give a full and lucid account of this most interesting, admirable, and valuable achievement in the interest of both science and art, — for to these twin branches its benefits were at first believed most to accrue. But even M. Arago's forecast, sound and discriminating as it was, fell far short of developing the ultimate value of Daguerre's discovery to mankind; for instead of its inuring exclusively to the benefit of science or art, or of either of them, it speedily passed into the possession of the whole civilized world, and became domesticated in every household to whose treasures of affection or memory it had contributed so priceless a gift. Still, even within the limitations which were supposed at first to govern it, the discovery produced a startling impression upon the public. Daguerre had gone no further at this time than to reproduce upon his plates such architectural objects as were familiar to the Parisians, and might therefore be easily recognized; but this feat, affording as it did the best test of the fidelity of Daguerre's processes, was quite enough to establish the fact that a great discovery had been made, and to fix a starting-point for the astonishing development that has succeeded Daguerre's original efforts.

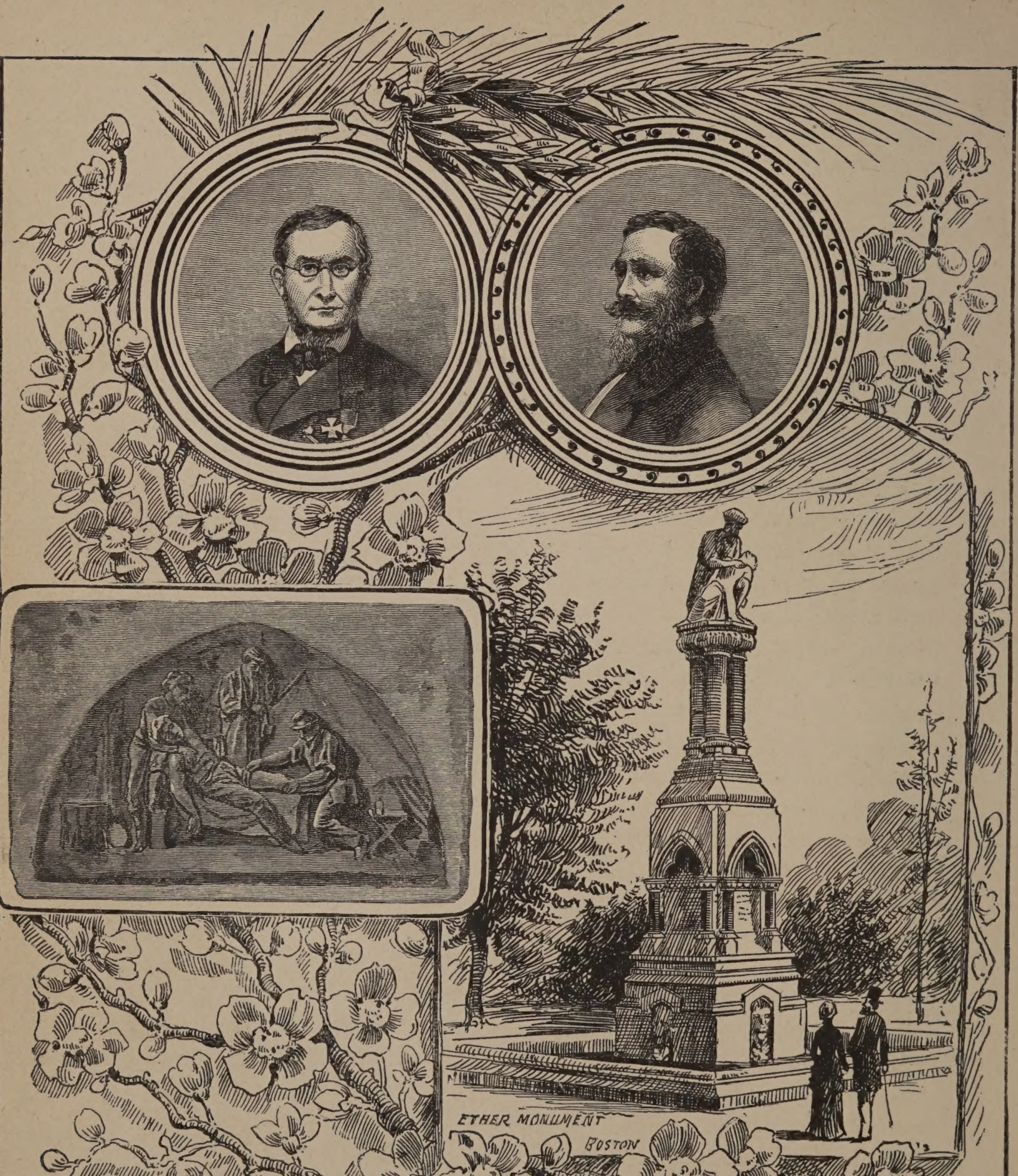
Let us trace the progress of the discovery a little, in order to show how far Daguerre may be entitled to the name that we have assigned to him of a benefactor of the race.

It is about two centuries ago since a Neapolitan scientist by the name of Giovanni Battista Porta discovered the *camera obscura*, or dark chamber, in which the images projected by a sun-ray upon the dark background of the chamber were reproduced with the utmost fidelity. But this was considered as no more than a curious phenomenon, and as such, attracted much attention from learned and unlearned. There the invention rested until Wedgwood, as we have stated in our sketch of him, attempted the transfer of objects, and also of paintings, sculptures, and engravings to his ware. Davy also made some experiments with the same general view; but neither succeeded in obtaining the results he aimed at for want of knowledge of the proper chemical substances to hold the pictures he had obtained, which faded or turned black as soon as exposed to the light. The matter was, however, too interesting to be dropped. In 1814 a Frenchman named Niepce turned his attention to the same subject, pursuing it indefatigably until he had worked out his own ideas; and it is to him, more than to any other, Daguerre excepted, that the final and signal success of the great invention is due. Niepce's first efforts were directed to the fixing of silhouettes by chemical substances. For years he pursued his favorite idea until he had perfected a process by which he was able to do what Wedgwood and Davy had failed to accomplish; namely, to copy engravings by the aid of the camera. Up to this point, where Niepce was joined by Daguerre as co-laborer in the purpose to work out the discovery to a practical solution, no one seems to have heard anything of Daguerre in connection with it, although M. Arago asserts that Daguerre had for several years been assiduously engaged upon the same thing as Niepce, each being ignorant of the other's purpose.

Daguerre was born at Cormeilles in 1789. From infancy he showed a predilection for designing. He came to Paris, like so many other young men of talent, in search of the career that the great metropolis had opened to his ardent imagination. His inclination for drawing, the proficiency he soon showed in that particular branch of art, procured him a situation as scene painter and decorator in the theatres of Paris; and in this profession he rapidly took a leading place. Daguerre's inventive genius soon asserted itself. He introduced many pleasing illusions by means of his art, to the wonder and delight of the Parisians; but his greatest success as a painter came when he opened to the public his diorama, which was at that time a novelty in scenic representation. It had an immense popularity. The arrangement was a circular hall having a movable floor, which, by turning with the spectators upon it, transferred them without inconvenience before the successive series of pictures with marvellous realistic effect. The diorama was, however, destroyed by fire.

At this epoch, therefore, we find that Daguerre was an artist of merit in his particular line who had made a study of, and had introduced many novel optical effects into, scenic display in the theatre. His native ingenuity and invention had been shown too in working out the various improvements introduced by him; but we are absolutely without knowledge respecting his earlier experiments with the *camera obscura*, or of the reasons which had induced him to set about the elucidation of its problems with all the energy of his nature. It is certain, only, that he had been some time at work over them, when he heard of M. Niepce, whom he immediately sought out, and with whom he subsequently formed a partnership for perfecting the discovery upon which both were intent. This instrument, which was signed in 1836, was duly recorded, and is in effect an admission by Niepce of Daguerre's claims at that particular stage of the discovery, since it is hardly to be supposed that Niepce would have admitted Daguerre to an equal share of the benefits of his own protracted experiments unless corresponding advantage to himself had been made clear to his mind. We state this because it is asserted that while Niepce disclosed his processes to Daguerre, there is nothing to show what Daguerre offered him in return. It was understood and agreed that the new discovery should bear the names of both the contracting parties; but in consequence of a condition imposed by M. Daguerre himself, the new process took the name of Daguerre only, — hence, Daguerreotype. Niepce died in 1833, six years before the discovery was made public. It aroused a veritable enthusiasm. At the instance of the Academy the process was purchased by the State; and then, in a spirit most honorable to the nation, it was given to the public, — Daguerre receiving an annuity of 6,000 francs, and Niepce *fils*, 4,000 francs. Daguerre continued to devote himself to the improvement of his processes. In the meantime an Englishman named Talbot had nearly secured the result achieved by Daguerre, and now appeared as his competitor for the honor of the discovery. His claims, however, were not allowed by the French Academy, to which body Mr. Talbot had submitted them, although his process differed from that of Daguerre in that Talbot took his images on chemically prepared paper instead of metal. In 1851, when M. Daguerre died, the art of photography was still in its infancy; but under the impetus of publicity, it has since made great progress. Not only his own process, but that of Talbot, has been entirely superseded by the improvements of Mr. Scott Archer, of England, glass being now used to receive the image instead of metal or paper, thus securing almost indefinite duplication of a subject. It should be stated, however, that Dr. J. W. Draper, of New York, was the first to obtain with enlarged lenses portraits by the process of Daguerre.

From every point of view, the grand discovery of Daguerre is one of the most useful that has signalized the century we live in; and its possibilities seem all the greater when we consider its earlier achievements in the light of present adaptability to the multitude of purposes for which it may be employed. If printing is the art preservative of all arts, photography merits a still higher place, since it preserves for us an exact counterpart of the object itself, while printing at most secures



WILLIAM T. G. MORTON.

only a history or a description, more or less accurate according to the ability of the writer to convey the impression he may have received. As a disseminator of the great works of art, photography has already proved a valuable means of art education to the masses.

WILLIAM T. G. MORTON.

[Born 1819. Died 1868.]

WE have once more to repeat, what must have become already apparent to the reader of the foregoing pages, that those discoveries from which mankind has derived the greatest benefits are as often the result of some quick grasp of principles, followed by decisive action thereon, as of the prolonged and studious application of scientific methods, by scientific men, to the same end. In making its awards the world does not ask for a diploma, but for a result. Such, in fact, is the whole philosophy of the ether discovery.

In the early part of the month of October, 1846, members of the medical staff of the Massachusetts General Hospital at Boston were much importuned by a young surgeon dentist of that city for permission to try upon some of the hospital patients the effect of a preparation he had discovered. He asserted that this preparation would produce insensibility to pain, that he had tried it successfully in his own practice in extracting teeth, and that he had fully proved it to be perfectly harmless in its after results upon the patient. In the language of one of the surgeons, Dr. Morton " haunted " them. The proposal itself was so novel, not to say audacious, when coming from one outside of the medical profession, so contrary to all the traditions of that profession, that it was some time before consent to make the trial could be had; but Morton's importunities at last prevailed with Dr. J. C. Warren, the eminent surgeon in charge, who agreed to make the experiment at the earliest opportunity. Dr. W. T. G. Morton was then a young man of twenty-six, a native of Charlton, Massachusetts, who had studied medicine for a short time in the office of Dr. Charles T. Jackson, and had attended medical lectures at the Massachusetts Hospital, the better to qualify himself for his chosen profession of dentistry, to which he returned with renewed zeal after concluding his studies in medicine and chemistry with Dr. Jackson, and in anatomy at the hospital. The acquaintance he had thus formed with members of the medical profession was no doubt of advantage to Dr. Morton in procuring for him a hearing, at least; but it is well established that his own unaided efforts were, at this critical period in its history, his sole reliance in obtaining the opportunity he sought of testing his new sleeping-potion. Even the officers of the hospital were incredulous. Morton would only disclose that his preparation was to be inhaled; but they wisely determined, as it turned out, to make the experiment in the interests of humanity as well as of medical science.

The opportunity soon came. A patient at the hospital, having to undergo an operation for the removal of a tumor from the neck, was brought into the operating theatre on Friday, October 16. By request of Dr. Warren, who had seasonably recollected his promise, the house surgeon had invited Dr. Morton to attend, and make the first application of his then unknown compound. It may readily be supposed that Dr. Morton had lost no time in presenting himself at the hospital. How the operation was performed, how its success was first heralded to the world, will be best understood and appreciated by giving here, *verbatim*, the account that appeared in the Boston "Transcript" of October 17, 1846. Several other journals have been consulted without finding any notice whatever of the operation. We beg the reader's attention to this fact, as it has an important bearing not only upon the discovery itself, but also upon the claim of priority afterwards advanced by another candidate for its honors. The "Transcript" said: —

"We understand that Dr. Morton, at the invitation of Dr. Hayward of the McLean Hospital, administered his preparation to produce sleep, yesterday morning, to a man who had a tumor extracted from the neck. Our informant, who conversed with one of the physicians who witnessed the operation, states that the man, after inhaling the preparation for a few moments, was lost in sleep, giving no symptom of suffering while Dr. Warren was extracting the tumor. He was totally unconscious of what was going on till near the close of the operation (which lasted longer than usual), when he drew a long sigh. The unconscious state in which the man was afforded the surgeon an opportunity to perform the operation expeditiously, uninterrupted by any struggles or shrinking of the patient."

On the day following the first operation, a similar one was performed with equal success. In both these cases the inhalation of Dr. Morton's preparation was followed by a condition of insensibility to pain throughout the critical part of the operation. But we now have to record the crowning triumph achieved by Dr. Morton, and we will do it in the language of the surgeon who performed the operation of amputating the leg of a female patient; for whatever may have been the opinion of medical experts in regard to the importance of the earlier operations, this at least was admitted to be a full and critical test of the value of the discovery to the practice of surgery, and as such its result was awaited with the greatest interest by unprofessional as well as professional persons.

Up to this time Dr. Morton had been administering sulphuric ether to the patients without letting the operating surgeons know more than what was indeed evident, that it was some highly volatile, spirituous liquid, which had a pungent, though not disagreeable odor when allowed to escape through the inhaling tube. He had, in fact, excellent reasons for pursuing this course.

Dr. Hayward, the surgeon who subsequently performed the first amputation, now determined to go no farther in the dark; and upon being put in charge of the surgical department of the hospital he refused to allow the surgical patients to inhale this preparation of Dr. Morton during his term of service, unless all the surgeons of the hospital were told what it was, and were satisfied of the safety of using it; "for," says Dr. Hayward, in his paper giving an account of this operation, "*we were then ignorant of the precise nature of it.* Dr. Warren agreed with me as to the propriety of this course." That is to say, Dr. Morton's preparation had been twice used at the hospital without knowledge of its component parts; or, in other words, it was unknown in the practice of surgery. Dr. Hayward goes on to say that "on the 6th of November Dr. Morton called at my house, and asked me if I was willing to have his preparation inhaled by a patient whose limb I was to amputate on the following day. I told him of the conversation I had had with Dr. Warren on the subject. Dr. Morton at once said that he was ready to let us know what the article was, and to give to the surgeons of the hospital the right to use it when they pleased. He added that he would send me a letter, in the course of the day, to this effect." Dr. Morton was as good as his word. The proposal was maturely considered by the surgeons, who were unanimously of the opinion that ether should be inhaled by the patient who was to undergo the operation on that day.

The old and (to the sufferer who had to endure them with no other strength than that with which nature had endowed him) appalling methods attendant upon a capital operation are too painful, even in the bare relation, for us to dwell upon. There was no royal road under the dissecting knife. The strong man and the tender woman alike must submit to a period of torture which not unfrequently left the poor maimed human being fluttering between life and death. To the agony attending the operation itself was joined that terrible tension of the nerves under which the patient often sunk into a deadly stupor from which no skill could recall him to life. But what were the few whom accidents or disease brought into our hospitals, there to be treated under the most favorable conditions, when compared with the numbers of maimed and crippled sufferers who had to submit to amputations hurriedly performed on the field of battle? At the very moment of Morton's discovery hundreds of our soldiers were undergoing in Mexico the cruel torture of the dissecting knife. We shudder to think how much suffering might have been averted, and how many valuable lives saved to the world, had there been earlier knowledge of the power of this wonderful anæsthesia[1] over pain. And yet we are asked to believe that the discovery was already in the possession of a prominent member of the medical fraternity!

At this capital operation, the first performed in any country with the aid of ether, the operating-room was crowded. The principal physicians and surgeons of the city, many medical students, besides men prominent in various callings, were there awaiting in the utmost anxiety the result of the experiment they were about to witness. Dr. Hayward simply told them that it had been decided to allow the patient to inhale an article which was said to have the power of annulling pain. The patient was then brought in. She was a delicate-looking girl of about twenty years of age, who had suffered for a long time from a scrofulous disease of the knee-joint. The mouth-piece of the inhaling instrument was put into her mouth, and she was directed to take long inspirations. In about three minutes Dr. Morton said, "She is ready." A deathlike stillness reigned in the room as Dr. Hayward began the operation by passing his knife directly through the diseased limb. Upon seeing this the spectators seemed to stop breathing. The patient gave no sign of feeling or consciousness whatever, but looked like one in a deep, quiet sleep. One long and audible murmur announced the relief experienced by the audience. When the last artery was being tied, the patient groaned, and consciousness soon returned; but she was wholly ignorant, and at first would not believe, that the surgeon's work was done, and that the leg had been removed while she slept.

The discovery was of course carried far and wide with all speed, since upon such certain demonstration of its invaluable worth to society as had been given, no other topic could begin to claim the same interest with the whole public, learned or unlearned, as this. In Europe it was received with the greatest enthusiasm, and was speedily introduced into the hospitals of

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[1] The use of this word in etherization was first proposed by Dr. O. W. Holmes.

England, France, and Germany with the same flattering results as had followed its use in our own country. Before the learned bodies of those countries the discussion of its merits and its possibilities superseded for the time every other question. But while the world was thus congratulating itself upon so auspicious an event, a most bitter controversy had begun in the United States as to who was entitled to the credit of the discovery. After the second surgical operation had been performed at the Massachusetts Hospital, and not until then, a new claimant appeared in Dr. Charles T. Jackson, with whom it has been mentioned that Dr. Morton had studied, and who had also laid claim to the discovery of the magnetic telegraph in opposition to Professor Morse. Dr. Jackson now asserted that he had not only discovered the anæsthetic properties of ether himself, but that he had explained them to Dr. Morton, and had suggested to him the use of ether in extracting teeth. Dr. Morton denied to Dr. Jackson any further agency in the discovery than some general information upon the chemical properties of ether dropped in the course of conversation. It appeared in evidence that not only had Dr. Jackson refused to sanction Dr. Morton's efforts to make the discovery public, but he had distinctly discountenanced them as reckless and untrustworthy. It was also shown that Dr. Morton had been experimenting with ether for some time before applying to Dr. Jackson for specific information in regard to the best way of inhaling it. For this information, given in his capacity of chemist and without reservation, Dr. Jackson made a fixed charge of $500; but upon the representations of mutual friends of the advantage to him of Dr. Jackson's name and influence, Dr. Morton generously agreed to allow the insertion of Dr. Jackson's name as joint discoverer with himself, in the caveat for a patent, Dr. Jackson then or subsequently assigning his own interest in the discovery to Dr. Morton for a stipulated consideration. In November, 1846, a patent was issued to Dr. Morton; but in consequence of the renewal of the controversy with Dr. Jackson, who had disavowed his previous engagements, the patentee's rights were so generally disregarded that in 1849 he found himself obliged to appeal to Congress for a pecuniary compensation in room of the valueless patent which he now offered to surrender.

Upon these facts, with all the voluminous testimony surrounding them, several reports are of record. One emanates from the Trustees of the Massachusetts General Hospital, who gave, by a unanimous voice, the honor of the discovery to Dr. Morton. One year later, upon request of Dr. Jackson, they reviewed their first decision, and unanimously confirmed it.

In Congress, from 1849 to 1854, inclusive, two reports were made by committees of the House of Representatives, the testimony in each case being exhaustively considered, affirming the right of Dr. Morton and recommending compensation. Two committees of the Senate concurred in the reports of the House. Bills were reported in both bodies, and were lost in the mass of unfinished business. Worn out and hopeless of any action on the part of Congress, Dr. Morton, by advice of the President, brought suit against an army surgeon for using ether in a government hospital, in order to establish a direct claim for compensation. He recovered judgment, but nothing else. In 1863, Dr. Morton's patent having in the meantime expired, the matter was again brought before Congress. Once more the decision was in Dr. Morton's favor; but no substantial aid to the now disheartened and bankrupt discoverer followed, and had it not been for the generous action of the medical profession of the country in setting on foot for him a national testimonial, the discoverer of etherization in surgery would perhaps have ended his days in poverty. He also received from the French Academy the Monthyon prize in the form of their largest gold medal. A similar prize, 2,500 francs, was also awarded to Dr. Jackson "for his observations and experiments upon the anæsthetic effects of sulphuric ether."

Dr. Morton died in 1868, after undergoing a series of trials, persecutions, and misfortunes almost unexampled in the eventful lives of great public benefactors. Received first with incredulity, then with hostility, by a large part of the medical world, the greatness of his discovery soon overwhelmed all opposition; but the indefatigable discoverer had to contend long and manfully against professional bigotry, the envy of little minds, the force of old traditions, or a conservatism which is startled by every innovation. Thê opposition to Morton was both able and unscrupulous. His enemies denounced and ridiculed him in the same breath, — denounced him for wishing to secure for himself and his family the fruits of his discovery; ridiculed him for his "audacity," "recklessness," and "presumption" in making that inestimable boon known to the world. From first to last his efforts to secure suitable recognition from the public or the nation were thwarted by the active hostility of a rival whose claim has been again and again sifted until nothing remains but a bare suggestion. Be it ever so great, of what advantage to the world, let us ask, is the knowledge that is withheld from it? Dr. Jackson's bore fruit only through the greater acuteness and persevering energy of Dr. Morton. While there is no evidence that Dr. Jackson could or would have advanced the knowledge of etherization one step farther than was known to all the medical world,[1] it remains more than probable that but for Dr. Morton's active entrance into the field this grandest discovery of the age might have been still an unsolved enigma. To this conclusion all the earlier and later investigation of the subject upon its merits has inevitably led; and while not acting in that spirit of enlightened generosity which had characterized the action of the French Government towards Daguerre and other eminent discoverers, our own has said, through its legislative and executive branches, and has placed it upon its records, that Dr. W. T. G. Morton is the actual discoverer of etherization in medicine.[2]

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[1] "The first discovery of the use of ether by inhalation is claimed for Sir H. Davy. The liquid is said to have been known to Raymond Sully, who lived in the thirteenth century. It was Dr. Frobenious, in 1730, who first drew the attention of chemists to this curious liquor, and he described several of its properties. In his paper it was first called *Ether*." — MUSPRATT. Morton first gave his discovery the name of Letheon.

[2] We can allow but the space of a note to the claim of Dr. Horace Wells, which is thus ably summarized in the "Congressional Report:" "That Dr. Horace Wells did not make any discovery of the anæsthetic properties of sulphuric ether, which he himself considered reliable, and which he thought proper to give to the world;

ALEXANDER GRAHAM BELL.

There is in the Public Garden of the City of Boston a beautiful monument, dedicated to and perpetuating the discovery of ether as an anæsthetic. It is a superb memorial of the skill of the sculptor Ward. Public opinion will, we think, sustain us in the wish to see an important omission supplied by placing thereon the name of the discoverer, William Thomas Green Morton. The monument will then be complete.

ALEXANDER GRAHAM BELL.

AT the Centennial Exhibition held at Philadelphia in 1876, commemorative largely of the world's progress, as well as of strictly American achievement and resources in every conceivable field of labor, was first seen an instrument that attracted marked attention by its novelty, as well as universal wonder by what it could be made to do. Had the Sphinx opened its granite lips, surprise could hardly have been greater or more genuine; for this machine could transmit articulate speech from one point to another with absolute fidelity, thus surpassing all the conceptions of physicists, while unscientific people hardly knew whether science had compassed another miracle, or whether they were being cheated with some clever device. Indeed, it was one of those amazing discoveries that, had it occurred in the days of the Inquisition, would have brought the inventor under suspicion of dealing in sorcery. This instrument was the now famous Speaking Telephone of Professor Alexander Graham Bell.

In order to convey something like a proper idea of the way in which the telephone struck eminent scientific thinkers and workers, we will reproduce the first experience of Sir William

that his experiments were confined to nitrous oxide, but did not show it to be an efficient and reliable anæsthetic agent, proper to be used in surgical operations and in obstetrical cases."

Thompson, himself an eminent electrician and inventor, had with Bell's original instrument; and we will give Sir William's own language, as addressed to the British Association at Glasgow, in September, 1876. We may then be better able to judge of the impression made by the telephone upon the general public.

"In the Department of Telegraphs in the United States," says Sir William Thompson, "I saw and heard Mr. Elisha Gray's electric telephone, of wonderful construction, which can repeat four despatches at the same time in the Morse code; and with some improvements in detail this instrument is evidently capable of a fourfold delivery. In the Canadian Department I heard 'To be or not to be? . . . There's the rub,' uttered through a telegraphic wire; and its pronunciation by electricity only made the rallying tone of the monosyllables more emphatic. The wire also repeated some extracts from New York papers. With my own ears I heard all this, distinctly articulated through the slender circular disk formed by the armature of an electro-magnet. It was my fellow-juryman, Professor Watson, who at the other extremity of the line uttered these words in a loud, distinct voice, while applying his mouth to a tightly stretched membrane provided with a small piece of soft iron, which executed movements corresponding to the sound-vibrations of the air, close to an electro-magnet introduced into the circuit."

This discovery he calls "the wonder of wonders in electric telegraphy," so that we may rest assured in respect to its striking novelty in the scientific world, although familiarity has so far worn off that novelty that we can hardly hope to reproduce, even in a slight degree, the extraordinary effect caused by the first achievements of the telephone; yet the public had been for a long time in possession of that simple toy, the string telephone, which, to unscientific minds at least, seemed the clew conducting to the greater discovery.

The telephone exhibited at Philadelphia by Bell with such striking results had reached only the first stages of development. Two instruments were required, — one to send, the other to receive, the spoken message. Consequently two would have to be used at each telephone station. Many improvements have since been made by Bell and others. "The prodigious results attained with the Bell telephones, which were at first discredited by many scientific men, necessarily provoked, as soon as their authenticity was proved, innumerable researches on the part of inventors, and even of those who were originally the most incredulous. A host of improvements have consequently been suggested."

It is claimed that the idea of the telephone is as old as the world itself, and that it was employed in some form to convey the decrees of the pagan oracles to those who consulted them, perhaps by means of a speaking-tube. Even as early as 1667 Robert Hooke seems to have made some progress in the study of acoustics, as related to the transmission of sound; for he asserts that with the help of a "distended wire he had propagated sound to a very considerable distance in an instant, or with seemingly as quick a motion as that of light."

But the string telephone, which was so freely hawked about the streets a few years ago, and was regarded only as an interesting plaything, seems to have been the first practical form that the coming discovery had assumed. This appeared in Europe in 1867. Its principle is too simple to need explanation. Under the best conditions, speech could be exchanged by it to a distance of 170 yards. The speaking-tube or mouthpiece, the diaphragm to catch and transmit vibrations of the voice, and the connecting chord, are all found in the string telephone, which was, so to speak, the forerunner of the electric telephone; and since that invention has come into general use the string telephone is again the fashion, as it succeeds in conveying to the unskilled mind, and in the simplest manner, those principles of acoustics common to both methods of transmission.

Up to the time of Bell's invention the transmission of speech could only be effected with the aid of acoustic tubes or of the string telephone. Yet the idea of electrical transmission seems clearly expressed by M. Charles Bourseul, in a paper published by him in 1854. He says: "I have, for example, asked myself whether speech itself may not be transmitted by electricity; in a word, if what is spoken in Vienna may not be heard in Paris. The thing is practicable in this way: Suppose that a man speaks near a movable disk sufficiently flexible to lose none of the vibrations of the voice, that this disk alternately makes and breaks the currents from a battery; you may have at a distance another disk, which will simultaneously execute the same vibrations. . . . Reproduce at the one end of the line the vibrations of air caused at the other, and speech will be transmitted, however complex the mechanism may be by which it is effected."

Still, we see that, notwithstanding the telephone existed in a crude form, and that the idea of electrical force as the agent destined for advancing it to the point of great utility, was slowly germinating in some minds at least, it was not for twenty years after the remarkable statements we have quoted from M. Bourseul, that the problem approached practical solution, and not until 1876 that it was finally solved in the manner we have already related. The demonstration then came, not from Europe, but from America. In that year, and in fact on the same day, both Professor Bell and Elisha Gray filed caveats in the Patent Office at Washington, for a speaking telephone. It is not our province to discuss the question of priority to which this simultaneous application gave rise. It seems certain that Gray had invented a perfectly practicable telephonic system of his own at least as early as Professor Bell. The patent, on account of some informality on the part of his distinguished competitor for this high honor, was however issued to Bell, who, as we have seen, exhibited his invention a few months later at Philadelphia in working condition, although, as we have shown, later improvements were required to adapt for general use.

Mr. A. Graham Bell's own account of his discovery of the telephone is substantially the following. It is not the result, he says, of a spontaneous and fortunate conception, but of long and patient studies in acoustic science and of the labors of the physicists who preceded him.[1] His father, Mr. Alexander M. Bell, of Edinburgh, had already made this science a study with the most interesting results, among which that of instilling into his son a taste for these experiments must take a foremost place. Bell first invented an electric harmonica, with a keyboard, that when set in motion could reproduce sounds corresponding to the notes struck, as in the piano-forte. He next turned his attention to the idea of making the electro-magnet transmit audible sounds, as had long been done by the Morse Sounders, — by applying this system to his electric harmonica. By employing an intensifying instrument at the receiving station, Bell thought it would be possible to obtain through a single wire simultaneous transmission of sounds produced by the action of the voice. This idea was realized almost at the same time by M. Paul Lacour, Elisha Gray, Edison, and Varley. Mr. Bell's study of electric telephones really dates from this time. Other claimants have appeared in Mr. John Camack, Signor Manzetti, Mr. Drawbaugh, and in Professor Dolbear, of Tufts College, Massachusetts.

Professor Bell's experiments were conducted in the laboratory of the Massachusetts Institute of Technology, — an institution yet young, but having already graduated some of the rising men of the day in the various departments of applied science. Here was perfected the instrument exhibited at Philadelphia. The use of a voltaic battery was at length discarded by Bell, who found that equal or better results might be had with an induction current, produced by permanent magnets. The battery telephone has been treated of in a preceding article; but it should be mentioned that, having found induced currents more favorable to telephonic transmission than voltaic currents, Mr. Edison, by an ingenious contrivance, soon transformed the current passing from his battery through the sender into induced currents.

Professor Bell's experiments in electrical science have pursued a wide range, and have shown him to be an original and penetrating thinker. During the fatal illness of the lamented Garfield, Professor Bell made a number of experiments with an electrical apparatus, with the view of detecting the exact position of the assassin's bullet; but in this instance no tangible results rewarded the hopes which had been raised in the minds of the surgeons, who had been baffled in every attempt to locate the ball. Professor Bell's experiments have also included a method of producing artificial respiration and of effecting sound by the action of light; but it is by the speaking telephone that he is most widely and favorably known to the world at large as a public benefactor. Certainly no modern invention has been received with more universal appreciation; for its uses are as unlimited as are the requirements of our every-day affairs in communicating with one another, and it has effected a saving in time and labor not readily to be estimated in dollars and cents. Truly this is an age of marvels; but the end is not yet.

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[1] See Mr. Bell's paper in the "Journal of the Society of Telegraphic Engineers," vol. vi. pp. 390, 391.

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